DON'T BIN YOUR OLD SCANNER!
Use it to capture & edit text and images
Full instructions on page 35

ISSUE 598 | 27 JAN – 9 FEB 2021

Computer act!ve

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Double Your ANTI-VIRUS FOR FREE!

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Discover which device suits YOU best – for live TV, recording & streaming p50

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WELCOME

From the Editor

Have you picked up any online habits during the latest lockdown? Mine is to visit https://window-swap.com and spend a relaxed few minutes hopping between the views from windows around the world. It takes me from my own view in suburban Surrey to Canada, Spain, the US, Russia and beyond.

It's addictive, but it can't compete with the rise of TV streaming. Nearly a year of various lockdowns has led to a spike in demand for services like Netflix and Amazon Prime, and the sticks that provide access to them – Roku, Fire TV, Chromecast and so on.

But streaming sticks have their limitations. You can't watch much live TV on them, and nor can you record. They also lack ports for your USB sticks. For these reasons, a TV box might suit you better, as we explain in our Cover Feature.

Please let me know what you use.

Daniel Booth
editor@computeractive.co.uk

PS Our 2020 Back Issue CD is now on sale – buy it from www.snipca.com/37026.

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HOW TO USE SNIPCA URLs

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren't websites themselves, which means they won't be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.

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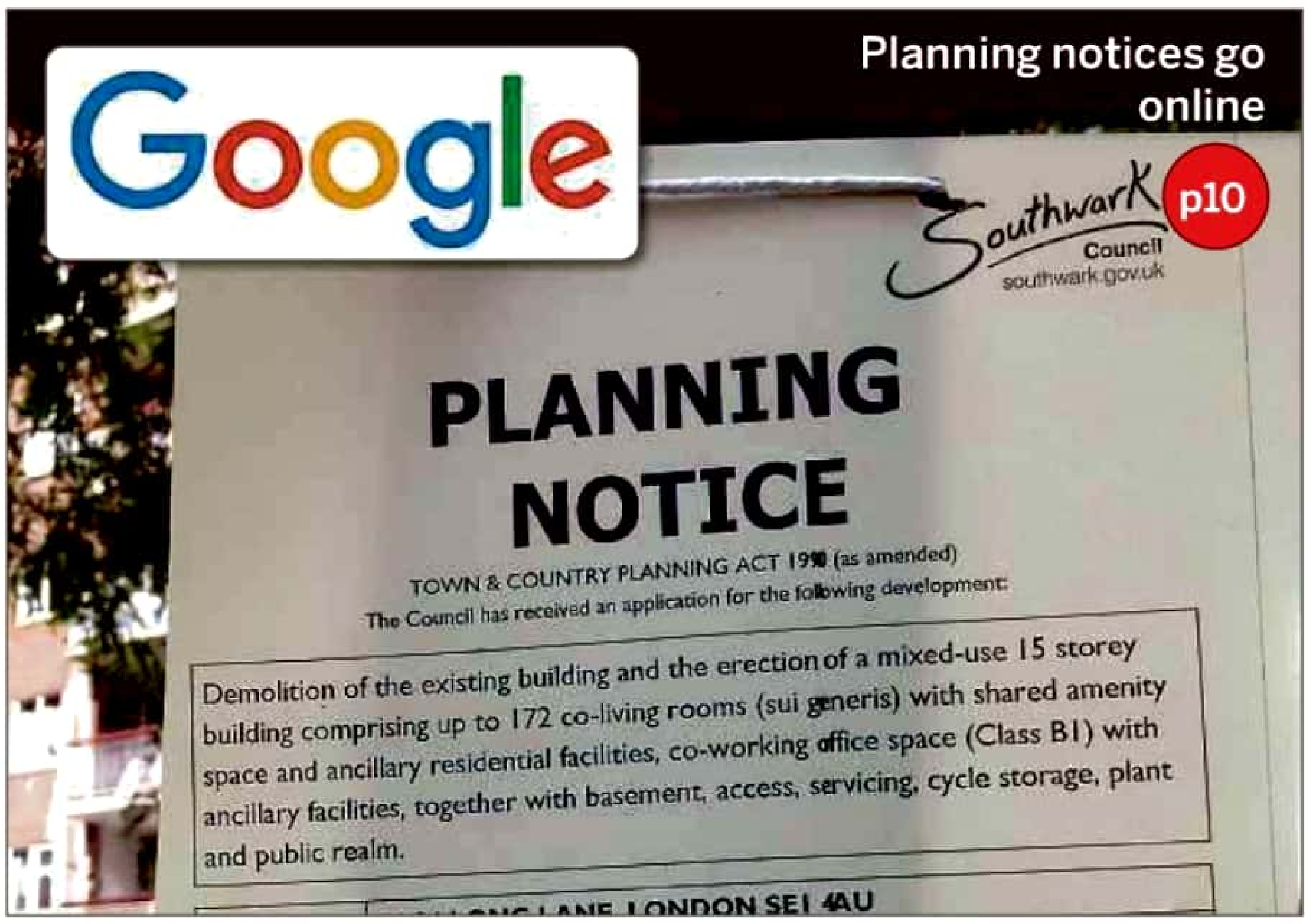
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PLANNING NOTICE

TOWN & COUNTRY PLANNING ACT 1990 (as amended)

The Council has received an application for the following development:

Demolition of the existing building and the erection of a mixed-use 15 storey building comprising up to 172 co-living rooms (sui generis) with shared amenity space and ancillary residential facilities, co-working office space (Class B1) with ancillary facilities, together with basement, access, servicing, cycle storage, plant and public realm.

Chillblast Fusion Marine 1660 Super

p23

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Epson WorkForce Pro WF-C5210DW

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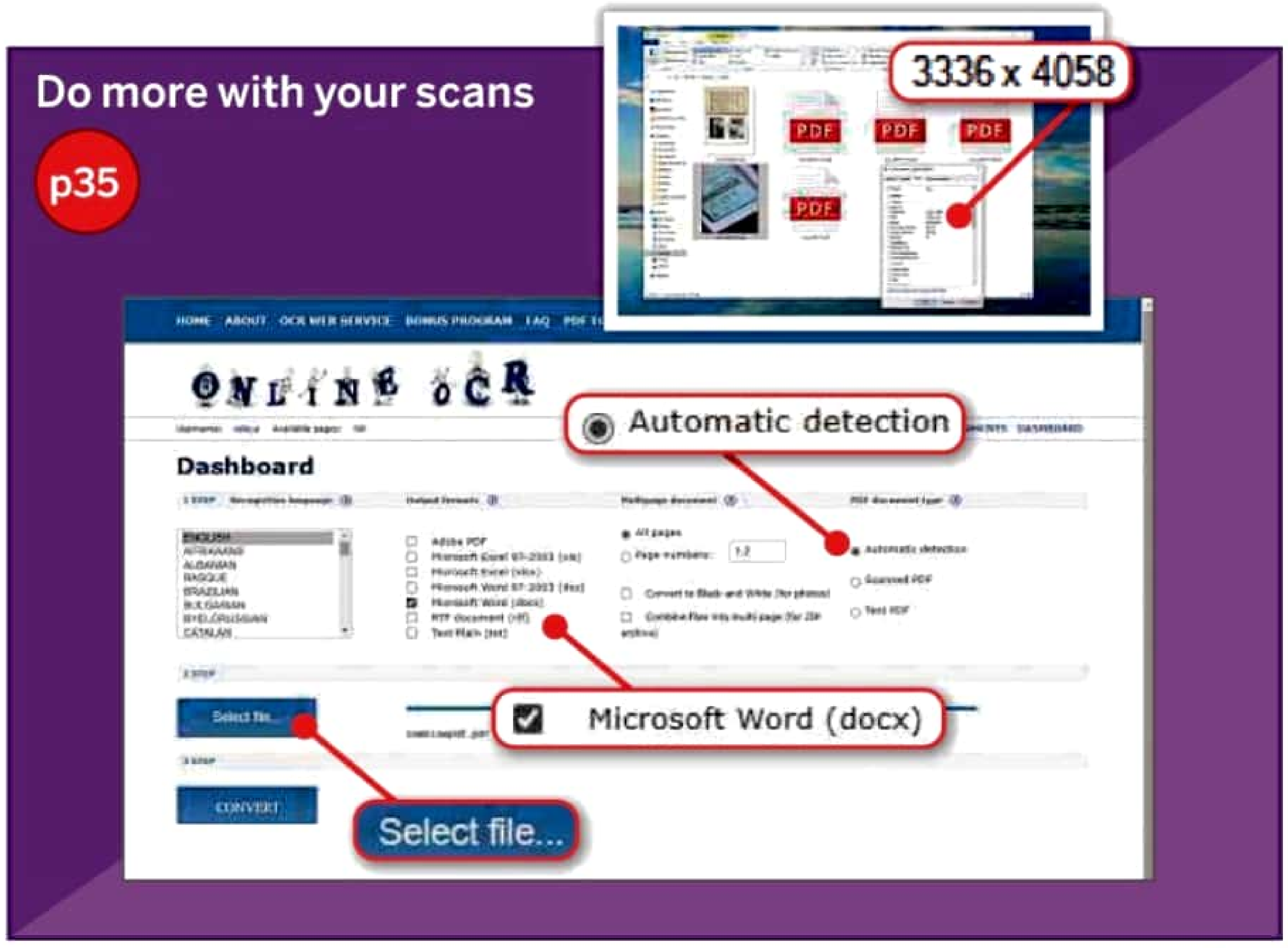
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COVER FEATURE P50
Discover which device suits YOU best – for live TV, recording & streaming
Roku
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BT
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EVERY WINDOWS TOOL THAT WILL DISAPPEAR SOON
p60

News

The top stories in the world of technology

Free data & Wi-Fi given to families during lockdown

Broadband providers and mobile networks are once again offering free data and Wi-Fi to the public to help them access the internet through the latest lockdown. It follows similar measures in March and April last year, when the UK went into lockdown for the first time.

WHAT WE THINK

Companies reacted quickly during the first lockdown to offer free data, so we weren't surprised they repeated this gesture. What's more interesting now, as we tentatively imagine a time beyond the pandemic, is whether they'll be as generous when struggling families and vulnerable people face difficulties in other times. They might come under pressure to provide free data during school holidays, for example, to make sure disadvantaged children don't fall behind. Or perhaps they'll be asked to provide discounted deals for pensioners, just as some over-75s receive free TV licences. Let's wait and see.

Many of these offers are aimed at helping parents struggling to afford the extra data needed to teach their children at home while schools are closed.

BT, for example, is now offering free Wi-Fi vouchers for its five million hotspots directly to schools, having previously made them available through the Government. The vouchers are allocated to schools in proportion to the number of pupils eligible for free school meals.

The vouchers normally cost £39 a month, or £30 per month if you sign up for three months. However, BT's Wi-Fi hotspot network covers only 20 per cent of UK addresses – check coverage at www.snipca.com/37133. Schools can apply for the vouchers via www.snipca.com/37132.

DATA
BT
Virgin media
EE
3
vodafone

In addition BT – through its **EE** brand – has extended its offer of free data to NHS staff to June 2021. Since launching last April, more than 300,000 NHS employees have signed up to the offer (at https://ee.co.uk/coronavirus/nhs).

Eight networks offer free mobile data

EE is one of eight networks to have joined a scheme to provide unlimited mobile data to support "disadvantaged" children in years three to 11 (ages 7 to 16). The other seven networks are **O2**, **Sky Mobile**, **SMARTY**, **Tesco Mobile**, **Three**, **Virgin Mobile** and **Vodafone**.

To be eligible, you need to meet three criteria: you don't have fixed broadband at home, you can't afford additional data for your devices, and the child's "face-to-face education" is being disrupted. Visit Gov.UK for more details and to apply: www.snipca.com/37134.

Many networks have also removed data charges for educational websites, including BBC Bitesize (www.bbc.co.uk/bitesize) and the Oak National Academy (www.thenational.academy). It means you'll be able to access the sites even if you've run out of mobile data.

Meanwhile **Virgin Media** is adding paid-for TV channels to customers for no extra cost, including Animal Planet HD, Crime+Investigation HD, Discovery Science, Eurosport 1 and 2 HD and Sky History. Read more at www.snipca.com/37139.

It's also offering vulnerable pay-as-you-go (PAYG) customers 500 minutes, 500 text messages and 1GB of extra data at no additional cost every month. Vulnerable customers on contracts can receive unlimited minutes and 10GB of additional data. Both are available until the end of March.

SMALLER ISPs ALSO OFFER FREE BROADBAND

Smaller broadband providers are also offering free services. **Hyperoptic** is giving free 50Mbps broadband to "families who currently do not have a reliable broadband connection" (more info at www.snipca.com/37135). The company supplies broadband in parts of 43 towns and cities, reaching more than 400,000 premises. Check availability on this map: www.hyperoptic.com/map. Another small provider, **Community Fibre**, is offering 50Mbps to "vulnerable households" in London (www.snipca.com/37136).

You'll like this... Google has fixed a flaw in the Android version of the NHS Covid-19 app (www.snipca.com/37144)

but not this... There's been a rise in Bitcoin investment scams (www.snipca.com/37143)

Windows 10X will stop thieves using your laptop

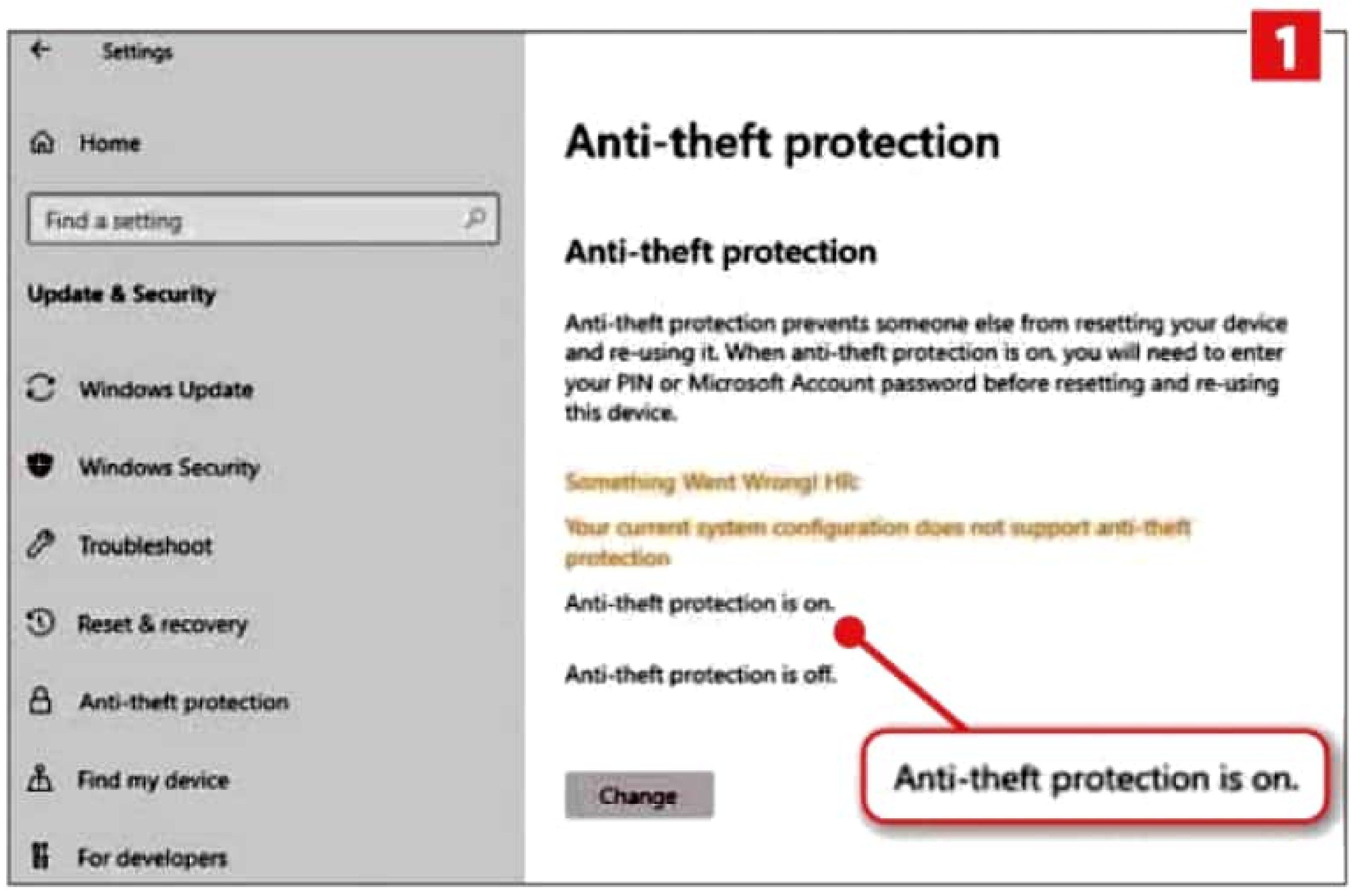
Windows 10X will come with an anti-theft security tool that will prevent laptop thieves from resetting the device in order to make it their own.

To reset a Windows 10X laptop, a thief would need your login details to sign in via the original account – which is the one you would have created when you bought the device.

Without access, thieves would be permanently locked out of the laptop. Also, the 'Find my device' feature would keep running, helping you locate it.

This protection will be turned off by default, so you would need to enable it (see screenshot **1**). In 2015, Microsoft added a similar tool to Windows Phone, called Reset Protection.

It seems that the tool is coming to only Windows 10X, the simplified version of the operating system expected to launch by June, not to the standard version of Windows 10.



Anti-theft protection

Anti-theft protection

Anti-theft protection prevents someone else from resetting your device and re-using it. When anti-theft protection is on, you will need to enter your PIN or Microsoft Account password before resetting and re-using this device.

Something Went Wrong! HR:

Your current system configuration does not support anti-theft protection

Anti-theft protection is on.

Anti-theft protection is off.

Anti-theft protection is on.

Windows 10X is seen as Microsoft's equivalent of Google's Chrome OS, with fewer tools than a traditional operating system. A video (www.snipca.com/37129) leaked online in mid-January shows how you'll be able to set up the system, and what the desktop **2** and settings page will look like.

To get Windows 10X you'll have to buy a new laptop running it. You won't be able to switch to it from your existing Windows 10 computer. We'll continue to reveal more tools as they are leaked.

IN BRIEF

LISTEN TO BBC SOUNDS ON SKY Q BOX

The BBC Sounds app has been added to Sky Q boxes, letting you listen to over 80,000 hours of audio content from podcasts, music playlists and live radio broadcasts. To find and open the app, speak "Launch BBC Sounds" into your Sky Q voice remote. You can subscribe to shows and bookmark them to play later, and also pick up where you stopped listening on other devices. For more on Sky Q turn to page 55.

NEW USB ADDS WI-FI 6 TO YOUR LAPTOP

Router manufacturer D-Link has unveiled what it claims is the world's fairst USB adapter that adds Wi-Fi 6 to your laptop. The DWA-X1850 (pictured) has WPA3 encryption, and is expected to go on sale between April and June this year. UK prices haven't been confirmed, but it will cost $100 (about £72) in the US.

Man who lost Bitcoin fortune offers £52m 'Covid fund' to find hard drive

An IT worker who accidentally threw away a hard drive containing a Bitcoin fortune has offered to give some of the money to his local council if they let him look for it in landfill.

James Howells (pictured), 35, bought the Bitcoins for almost nothing in 2009, but forgot about them when he put the drive in a drawer after he spilt drink on it. When he threw the drive away in 2013 he mistakenly thought everything had been wiped from it.

He realised soon after that the Bitcoins left on the drive had risen in value to about £4.6m. They are now worth around 50 times the amount, meaning the drive contains an incredible £210m.

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He told the BBC that if Newport City Council allows him to look for the drive, he will donate 25 per cent of the amount (£52.5m) to a Covid relief fund, with "no questions asked".

Mr Howells said he knows where he threw away the drive and so would use a grid reference to locate where it's buried, and pay a professional team to dig for it. But the council has repeatedly refused him permission, saying its licensing permit forbids excavation.

A council spokeswoman said that the work would have "a huge environmental impact on the surrounding area" and could cost "millions of pounds – without any guarantee of either finding it or it still being in working order".

TOMORROW'S WORLD

On the left (below) is a phone, on the right is a tablet – but it's actually the same device. It transforms using a rollable screen, as South Korean tech giant LG teasingly demonstrated at the CES 2021 technology show in January. It's probably years away, but this video gives you an 18-second glimpse into the future of handheld devices: www.snipca.com/37125.

IN BRIEF

NETFLIX

NETFLIX HIKES PRICES BY £24 A YEAR

Netflix is increasing its prices from between £12 and £24 a year. Its Standard package, which lets you watch in high definition on two devices at the same time and download shows to them, will increase from £8.99 a month to £9.99. Its Premium plan, letting you stream in *ultra* high definition on four devices and download to them, will rise from £11.99 to £13.99. The increases will apply from February.

GROWTH IN PC SALES FASTEST FOR A DECADE

Sales of computers increased last year by the fastest rate since 2010, as people bought new machines during lockdown. Industry analysts Canalys reported that 297 million computers were sold in 2020, up from 267.5 million in 2019, a rise of 11 per cent. Lenovo remains the market-leading brand, making around a quarter of all computers sold, followed by HP in second and Dell in third.

THE WORLD'S GONE MAD!

It won't have escaped your attention that there are a lot of self-obsessed people online. Microsoft now wants to give them the chance to carry on after they die as "conversational chat bots" based on their "images, voice data, social-media posts, electronic messages etc". It has filed a patent in the US to make this a reality, though thankfully it's many years off.

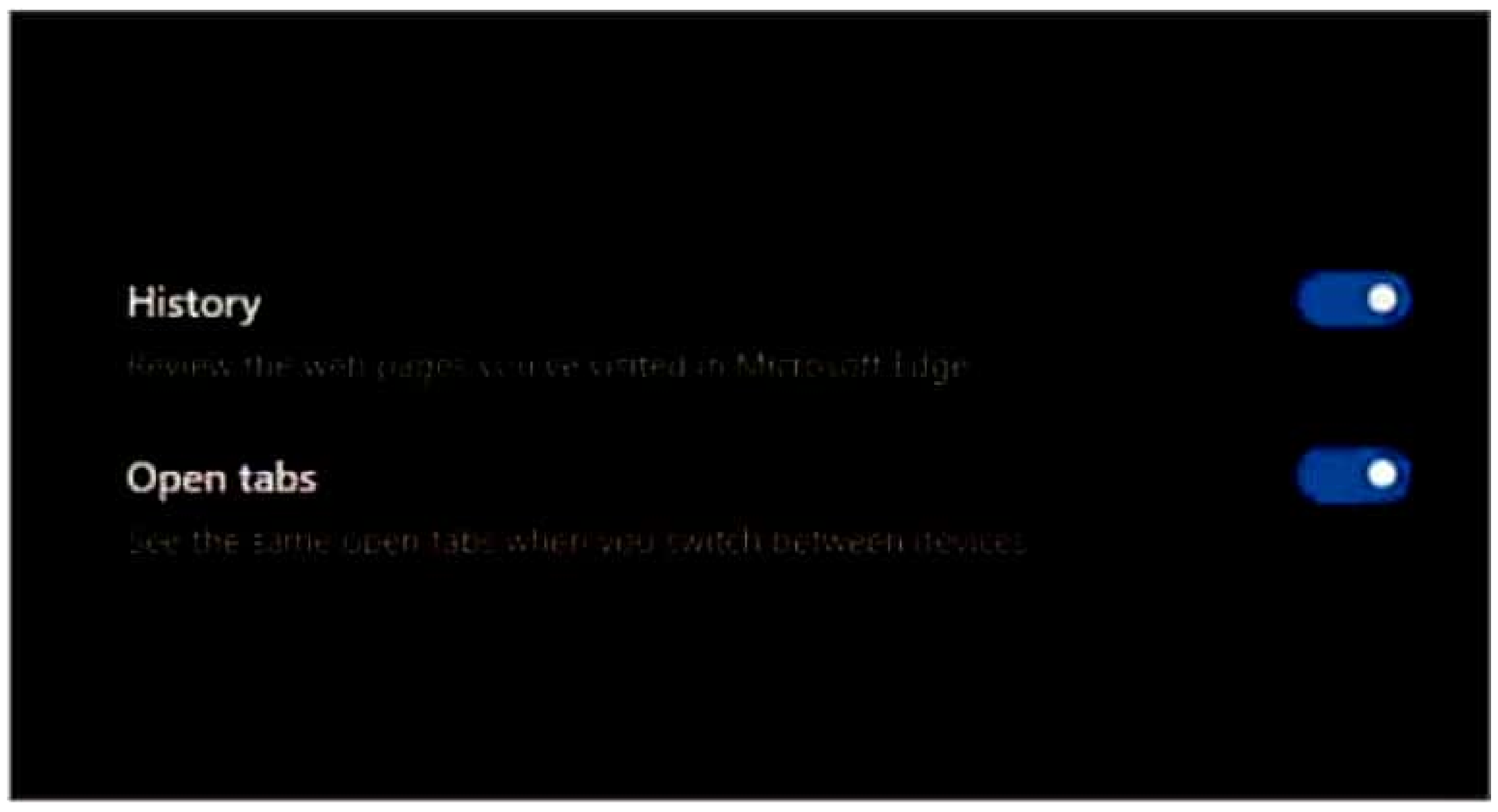
Sync your Edge browsing history and tabs across devices

You can now start syncing your browsing history in Microsoft Edge across different computers running Windows 10. It means you can finish browsing Edge on one computer and see the sites you just had open when you continue on another machine.

It works also in the Android (www.snipca.com/37101) and iOS (www.snipca.com/37102) versions of Edge, meaning you can close the browser on your computer and view your history when you open Edge on your phone or tablet.

To see your history, either press Ctrl+H or click the three horizontal dots at the top right and select History in the menu. You can also type edge://history/all into Edge's browser bar.

In addition, Edge now lets you sync any tabs you have open. This means you'll see the same web pages across several devices as you browse on them.



History

Review the web pages you've visited in Microsoft Edge

Open tabs

See the same open tabs when you switch between devices

Microsoft said it's rolling out these features gradually throughout the world, with the UK being one of the first countries to get it.

You need to check your settings in Edge to see whether the tools are available yet. To do this, click the three dots top right, then Settings. Next, click 'Profiles' in the menu on the left, followed by Sync in the middle. If you can see History and 'Open tabs' headings, click the sliders to turn them blue (see screenshot). Edge will now start syncing across your devices. You can also reach this page in Settings by typing edge://settings/profiles/sync in Edge's browser bar at the top.

You'll need to follow similar steps in the Edge app to activate syncing between your computer and phone/tablet.

Both Google Chrome and Firefox already let you sync your history and tabs across devices.

Take screen breaks during lockdown to save eyes

An eye-health charity is encouraging people to take regular breaks from staring at their devices during lockdown.

The warning comes as research shows that a third of people believe their eyesight has worsened since the coronavirus pandemic began because they're spending more time looking at computers, phones and tablets.

Charity 'Fight for Sight' is recommending people adopt the '20-20-20' rule to protect their sight. To do this, focus your eyes on something 20 feet away for 20 seconds, every 20 minutes you're looking at a screen.

A recent survey carried out by the charity found that out of 2,000 people, half have used screens more since last March. Respondents said they were having difficulty reading, and suffering from headaches and migraines as well as poorer night vision.

The survey suggested also that one in five people were less likely to get an eye test now than before the pandemic began because they were worried about catching or spreading the virus.

The charity said it wanted to remind people that "the majority of opticians are open for appointments throughout lockdown restrictions".

Under UK law, companies must pay for eye tests for their employees if they have to use a screen for more than one hour a day.

✉ Has your eyesight worsened during lockdown? Let us know: letters@computeractive.co.uk

BT delays new broadband installations until 1 March

MARCH
1
openreach
FP12 UAH

BT Openreach is delaying home installations of full-fibre broadband until at least 1 March in order to avoid engineers entering customers' homes during lockdown.

It means that neither BT nor those providers that use Openreach's cables – including Plusnet, Sky and TalkTalk - will be able to install fibre connections for at least another month.

The company made a similar decision last March when the first lockdown was announced, lifting the restrictions three months later.

It acknowledged that installing broadband is "key to keeping the UK connected", which is why its staff are classified as 'key workers'. This means they can still enter customers' homes and businesses to carry out "essential work" such as urgent repairs where there's a complete loss of service.

However, Openreach said its engineers will "always aim to spend as little time inside homes as possible, whilst working safely with distancing, ventilation and PPE".

The company will also continue to install Fibre-to-the-Cabinet (FTTC) and ADSL lines throughout lockdown because these don't require engineers to enter homes.

BOXING DAY BREAKS WEB RECORDS

Openreach recorded its busiest ever day for web traffic on Boxing Day, when people online used 210 petabytes (PBs) across the UK network. Each petabyte is worth 1,000,000 gigabytes (GBs). It came at the end of a record-breaking year for broadband data, with users consuming around 50,000PB, up from 22,000PB in 2019. Overall, the average property on an Openreach fibre network used around 3,000GB over the year, working out at 8-9GB per day.

David Attenborough hologram to promote 5G in your home

Sir David Attenborough (pictured) will appear as a hologram in a Government-funded app to promote innovative uses of 5G networks.

The presenter and naturalist will front the augmented reality app Green Planet that will let users see exotic plants and animals in their own home. It will tie in with a five-part documentary series of the same name expected to be broadcast in 2022.

Minister for Digital Infrastructure Matt Warman said the app will show "how new technology can reconnect us with the natural world whilst demonstrating the power of 5G to a huge new audience".

Overall the Government is investing £28m in nine projects to showcase 5G's potential. As well as being much faster than the 4G signal, 5G devices can handle far greater amounts of data.

The Government hopes this will spur the growth of new technologies such as high-definition live-stream filming and automated drones and vehicles.

One of the schemes will develop instant replays of sports events at London's O2 arena, letting spectators instantly re-watch key moments on their phones.

Other projects include driverless taxis being tested at the MK Stadium, home to Milton Keynes Dons FC, and exhibits from the Eden Project in Cornwall shown online in 360-degree videos.

Mr Warman claimed the projects "will demonstrate how the blistering speeds of 5G can put some rocket fuel in our economy and help businesses bounce back from the pandemic".

For the full list of projects visit www.snipca.com/37110.

✉ Do you think 5G will help grow the economy after the pandemic? Let us know: letters@computeractive.co.uk

IN BRIEF

HUGE RISE IN COST OF THREE PAYG CALLS

The cost of sending calls, texts and data on Three's pay-as-you-go (PAYG) packages will rise steeply on 16 February. Calls will increase to 10p a minute (from 3p), texts to 10p (from 2p), and data to 5p per MB (from 1p). The biggest rise is in sending texts internationally outside the EU, from 2p to 35p – a jump of 1,650 per cent. Three said this rise is in line with its new standard rates for using your phone at home, and isn't linked to Brexit.

NEW-LOOK POWERTOYS EASIER TO USE

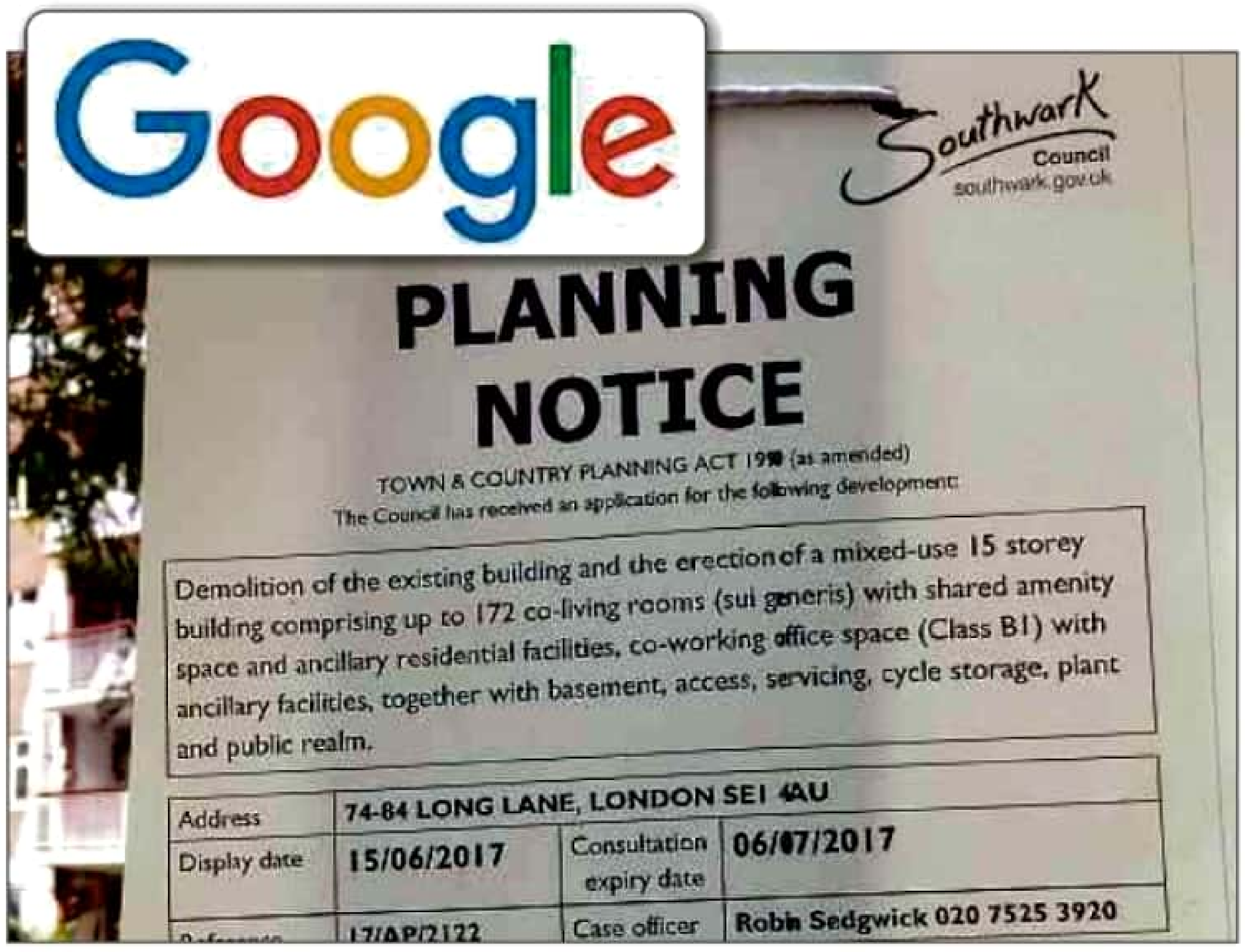
Microsoft is planning to revamp the PowerToys interface to make it easier to use its tools. At the moment, each tool opens in the background, causing some users to wonder whether it has launched properly. To make things clearer, Microsoft's developers will make the features of each tool appear when you launch PowerToys from the system tray. They've posted a preview video showing it in action: www.snipca.com/37115.

O2 ADDS 42 TOWNS TO ITS 5G NETWORK

O2 has added 42 locations to its 5G network, including Bournemouth, Doncaster, Inverness and Southampton, bringing the total to 150 around the UK. It has also increased its 5G range in London, Birmingham, Glasgow, Bristol, Liverpool and Manchester. To see the full list, visit www.snipca.com/37122 and scroll down. Visit www.o2.co.uk/coveragechecker to check whether you can get 5G in your area.

Will planning notices move from lamp posts to Google?

It's part of the Government's plan to "modernise" the planning process



Google

Southwark Council
southwark.gov.uk

PLANNING
NOTICE

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Address	74-84 LONG LANE, LONDON SE1 4AU		
Display date	15/06/2017	Consultation expiry date	06/07/2017
	17/AP/2122	Case officer	Robin Sedgwick 020 7525 3920

THE FACTS

- The Government wants to move local planning notices from lamp posts, libraries and newspapers to the internet
- Google is spending £1m on a project to help newspapers and councils post notices online
- You'll be able to search the notices for information local to you

In Douglas Adams's comic novel *The Hitchhiker's Guide to the Galaxy*, the permanently bewildered hero Arthur Dent lies down in front of a bulldozer to prevent it from destroying his house. He's told by a jobsworth council worker that permission to demolish his home for a bypass had been available to view in the local planning office for the past nine months.

"Yes," Arthur replies. "It was on display in the bottom of a locked filing cabinet, stuck in a disused lavatory with a sign on the door saying 'Beware of the Leopard'".

Shortly after this Earth itself is demolished, which rather puts Arthur's inconvenience into perspective. But his frustration has been shared by thousands of UK residents over the years, albeit without the threat of being mauled by one of the world's five big cats.

> Covid has highlighted the need for planning services that can be accessed from home, rather than stored in dusty cabinets

The traditional ways to read a planning notice require visiting a library, scouring adverts in your local newspaper, or squinting at the microscopic text on signs strapped to lamp posts. The Government wants to make life easier by bringing notices online as part of its push to modernise the planning process. In doing so, it will tell local authorities they won't have to print statutory notices in local newspapers.

The past year has made this change more urgent, the Government said. Its 'Planning for the future' white paper, published last August, said that the Covid-19 pandemic "has highlighted the need for modern digital planning services that can be accessed from home", rather than stored in dusty cabinets guarded by leopards.

Inevitably, the scheme involves Google. It has given £1m to a project to build a single website on which all councils nationwide can publish planning notices, as well as on about 800 local news websites.

You'll be able to search the information for planning notices near you, and sign up for alerts related to a particular area. Google will provide technical advice to the newspapers to help ensure the information reaches as many people as possible.

Google's money comes from its News Initiative (https://newsinitiative.withgoogle.com), which funds projects that "work with the news industry to help journalism thrive in the digital age".

It launched the scheme in 2018, following pressure from regulators and the media over how much money it makes from adverts placed alongside news stories written by newspapers and websites.

Local newspapers say Google's involvement will help compensate for the money they'll lose if councils stop advertising planning notices in print. They claim this is worth £10m a year to the UK newspaper industry, further wounding a sector already hit by falling advertising revenues caused by the pandemic. Publishers say that losing this money could put the jobs of 400 journalists at risk.

While welcoming the online scheme, publishers want the Government to keep the legal requirement for councils to place planning notices in newspapers. They point out rightly that many people don't use the internet – around 13 per cent (roughly 6.5 million) of the UK's adult population – not to mention the many other millions who *do* go online but nonetheless prefer reading newspapers and magazines to websites.

For Google's part, it hopes such measures will prove it can coexist with traditional forms of media such as local newspapers, and therefore prevent (or more likely delay) Government regulation.

We don't see any reason why notices shouldn't appear online *and* in print. With such wide coverage, even Arthur Dent would probably have found the info he was looking for.

Protect **your tech**

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

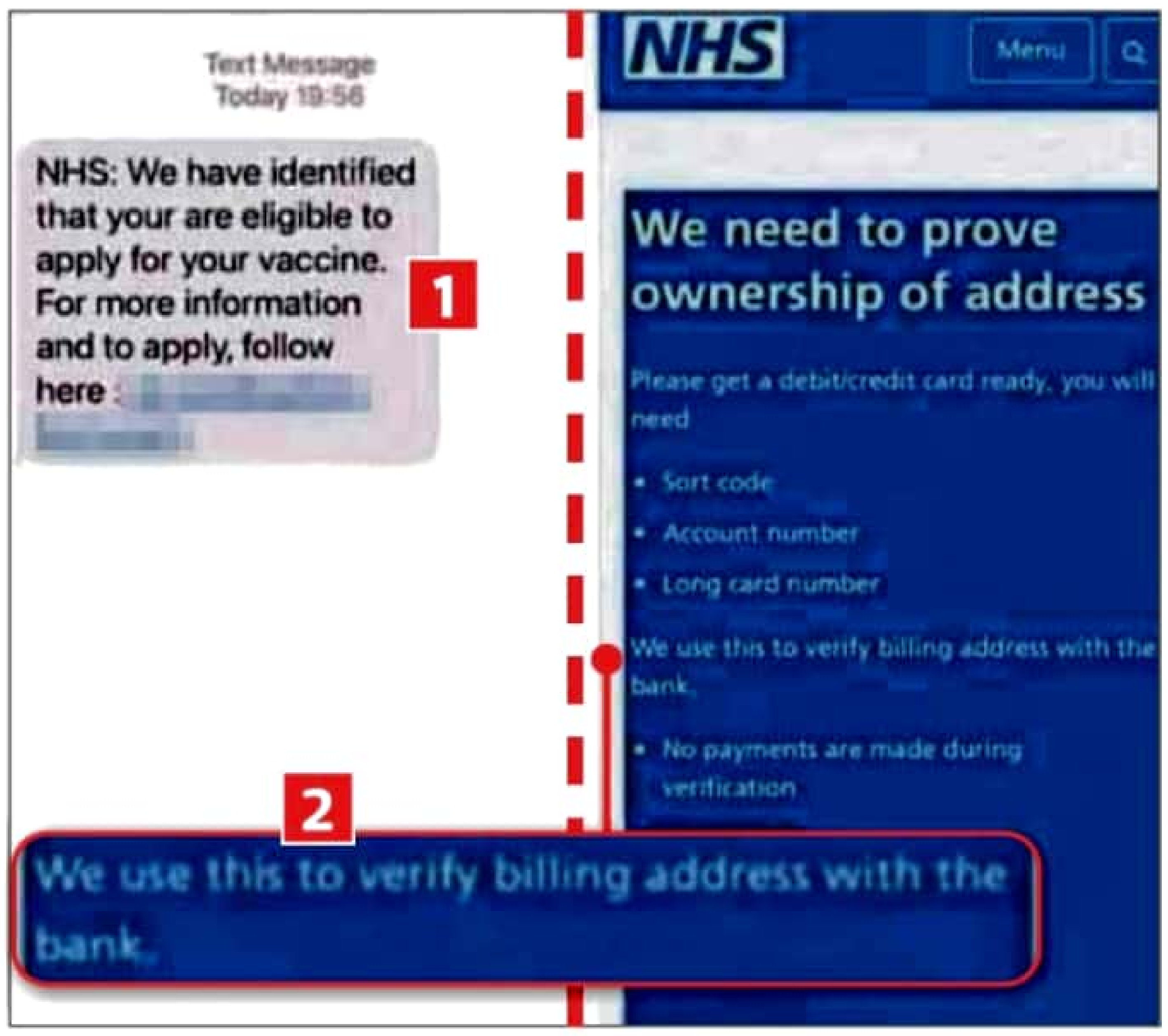
Money-stealing NHS vaccine texts

What's the threat?

Fraudsters are sending fake text messages about the coronavirus vaccine in an attempt to access your bank account and steal your money.

The scams, spotted by the Chartered Trading Standards Institute (CTSI), claim to be from the NHS, and state that "we have identified that you are eligible to apply for your vaccine" (1 in the screenshot).

It tells you to click a link, which directs you to what looks like a genuine NHS site asking for your name and address. It also asks you to fill in your bank details to "verify billing address with the bank" 2.



NHS: We have identified that your are eligible to apply for your vaccine. For more information and to apply, follow here : [redacted]

We need to prove ownership of address

Please get a debit/credit card ready, you will need

- Sort code
- Account number
- Long card number

We use this to verify billing address with the bank.

- No payments are made during verification

We use this to verify billing address with the bank.

How can you stay safe?

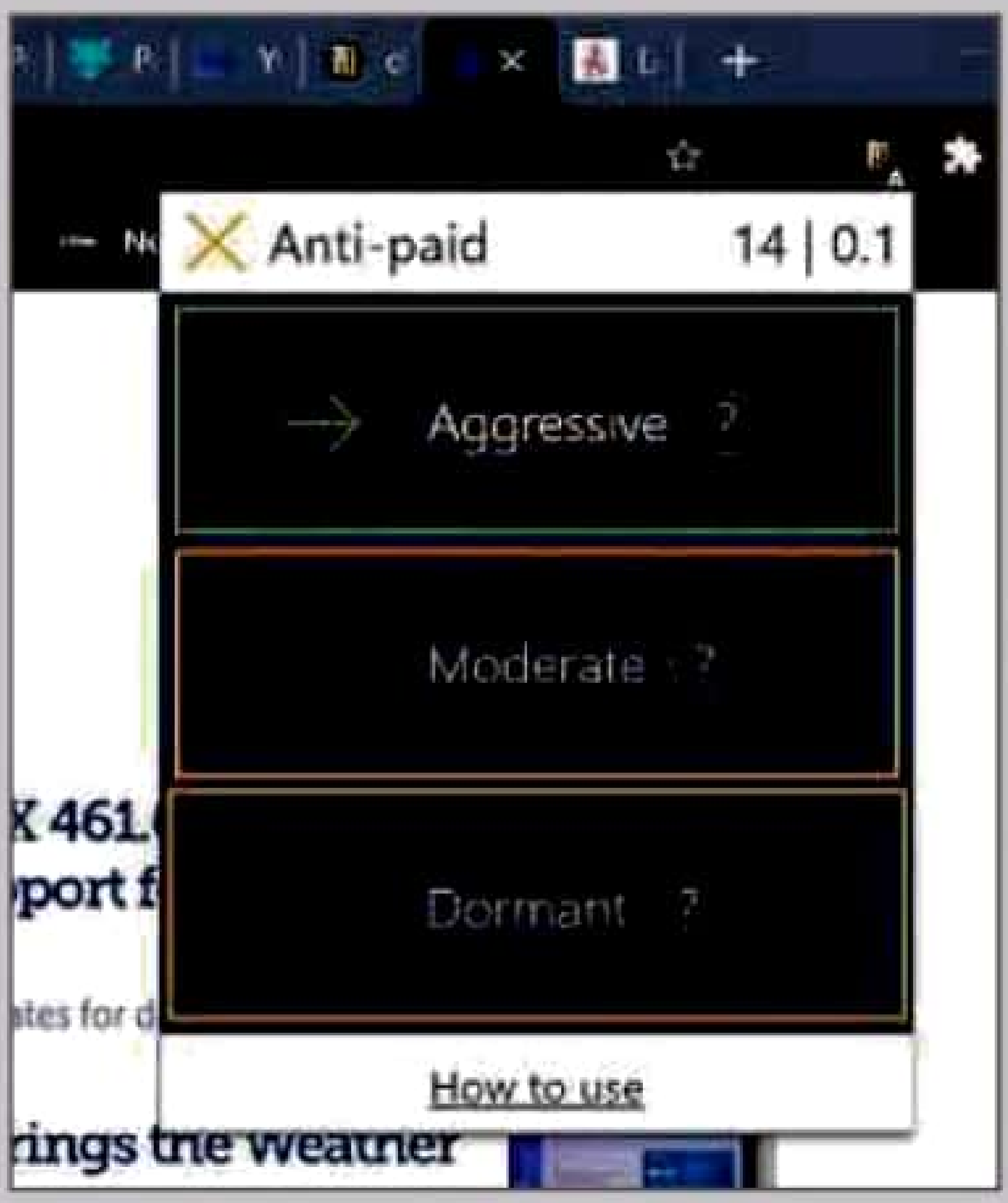
In Issue 597's Protect Your Tech we told you that Interpol had warned the public about scammers exploiting the rollout of the vaccine, and here we have the first example. Any message supposedly from the NHS that asks for your bank details should ring enough alarm bells to wake an entire neighbourhood. The NHS would never request such information, nor would it ever need passwords for online accounts and PINs. For genuine NHS updates on the vaccine, bookmark this site: www.snipca.com/36961.

The CTSI said the scam was first identified in the Western Isles of Scotland, but there's every reason to expect it will spread through the UK just as quickly as the virus itself. Since the pandemic began nearly a year ago, scammers have been adapting their tactics to exploit the latest development in the fight against the disease. The vaccine gives them another opportunity, as does the latest lockdown, so be highly suspicious of any phone messages or emails you weren't expecting.

Sadly, this is unlikely to be the final Covid-related scam. We'll continue to expose similar attempts to con you.

New tools | PopUpOff
www.snipca.com/37072

There are only three certainties in life: death, taxes, and browser pop-ups. These irritating messages appear when you visit a website, usually asking you to sign up for alerts or newsletters. Sometimes they're downright malicious, tricking you into installing malware.



Google is already blocking some of these (see 'Protect Your Tech', Issue 593), but you should also try the browser extension PopUpOff. Version 2 of the tool has an automode which lets you choose how strictly you want to block notifications on individual sites.

To install it, visit the link above and click the relevant browser icon at the bottom left (Chrome, Firefox, Opera or Edge). Once installed, visit any website then click the extension's icon (a white P and a yellow O) in your browser bar and select Aggressive, Moderate or Dormant.

Aggressive will be too extreme for most people because as well as pop-ups it removes the navigation bars that help you browse a site. Dormant leaves sites as they are, so we recommend Moderate instead, which leaves important information but blocks all the annoying stuff.

ScamWatch
Readers warn readers

I hung up on aggressive Amazon scammer

I received an automated call supposedly from Amazon telling me that my account needed renewing, at a cost of £79. To continue, I had to press 1, which I did. I was put through to a person who explained that he could process the renewal via my mobile phone. I said I'd go into my account and do it that way. He then became aggressive, telling me it had to be done by phone, so I hung up. I took note of the caller's number and checked on Google to see if it was registered as a scammer. There were similar numbers, but not the same one.

Jim Cox

Warn your fellow readers about scams at letters@computeractive.co.uk

Letters

Tell us what's on your mind

Sorry Martin Lewis, you're wrong about web scams

Question of the Fortnight

Why doesn't the Online Harms Bill protect scam victims?

Normally I agree with Martin Lewis and his campaigns, but I think he's misguided in his bid to add scam protection to the Government's Online Harms Bill ('Question of the Fortnight', Issue 597). I have a lot of respect for Martin's work in protecting the vulnerable, but clamping down on scams requires different techniques to tackling illegal content like terrorist videos and images of child sexual abuse.

Scams are usually perpetrated by small-time crooks and should be dealt with by the police, as indeed some (but nowhere near enough) are. They are clearly harrowing for the victim, but they don't represent existential threats to our way of life, as terrorist propaganda does, and they're not as sickening as online child abuse. These threats are of a different severity entirely.

I know Mr Lewis likes to take on the authorities, but he should tone down some of his language. Leaving scams out of the bill isn't "unthinkable", as he claims. Such mock outrage reminds me of the explosive language you often find in scams.

Dennis Stanley

Netflix news would be 'healthy alternative' to BBC

I disagree with Leonard Berry's Star Letter (Issue 597), in which he rails against the prospect of Netflix and Amazon Prime providing news bulletins in the UK. He suggests leaving news to the BBC and ITV because they "have woven themselves into the fabric of our life". But to me, that's the very reason we need the kind of different perspective that the likes of Netflix and Amazon would provide. It would be a healthy, valid and vital alternative.

When I watch the BBC's news coverage these days, I know exactly what angle it's going to take, on whatever subject. The same with news from Channel 4, ITV and Sky. It's got to the point where TV news has the same bias as newspaper coverage. Perhaps Netflix and Amazon Prime would give us something different that we didn't realise we needed until it arrived?

Trevor Raine

Microsoft's plan for AI grammar is terrible

Microsoft's plan to use artificial intelligence (AI) in Word to suggest 'improvements' to grammar is a terrible idea (News, Issue 597, page 6). Grammar pedants have always insisted on specific rules, refusing to take into account that grammatical orthodoxy has always changed over time. What made sense 200 years ago doesn't necessarily make sense now, and you can bet that anyone in 2221 reading old issues of *Computeractive* will be baffled by some of the phrases used now.

The problem with AI is that it can't cope with common sense. It will operate under strict, logical parameters that will make some daft suggestions. People who lack confidence in their writing will think Microsoft knows best, and make changes to their work that will actually make it less clear. The only people who'll be pleased are the pedants who want grammar preserved forever in aspic, never to change or evolve.

Dr Paul Ross

BT's rubbish 4G made me move from village

BT have got an incredible cheek claiming their 4G home service is a suitable alternative to fibre (News, Issue 598, page 7). I used to live in a Norfolk village with speeds around 10Mbps and no hope of getting faster fibre. I was then tempted by BT's 4G offer, and tried it for six months, but the service was too unreliable. With no hope of fibre on the horizon, I had no choice but to leave the village and move to a flat in the centre of Norwich, where I can get 100Mbps easily. Just as people used to leave the countryside in search of work, I wonder if they'll now do so in search of fast broadband.

Dave Bryson

Why I still use Adobe Acrobat Reader

In Issue 596's Cover Feature ('Software You Should Never Install'), you mention Adobe Acrobat Reader as a program to stop using and recommend that we use Microsoft Edge instead. A number of years ago I tried to move away from Adobe Acrobat Reader because of its enormous size. I tried CutePDF (www.cutepdf.com) and other software, but they all had limitations, such as a maximum number of PDFs you could open. As an electronic designer, I

My Zzzoom chats over Christmas

Paul Anderson is spot on that Zoom meetings are better than office meetings (Letters, Issue 597). In real life, people love the sound of their own voice and can waffle on for ages. In video meetings, talking over each other is a problem, so people choose their words more carefully. Everyone seems to get to the point more quickly, once you've dispensed with the 'Can you hear me?' pleasantries. Overall, meetings last half as long.

Paul mentions that some physical meetings are so dull that it can send people to sleep. In my experience, some video chats can also cause attendees to nod off. Like most families, I couldn't meet my ageing parents over Christmas, so had to introduce them to

video chats. They coped well with the technology, but on several occasions one of them (first my mother, then my father) fell asleep while I was still talking! To be fair, both chats were late in the evening, but it just goes to show that you can be just as dull by video as you can in real life.

Ian Whatmore

need the unlimited PDFs that you get with Reader.

The other great feature of Reader is the print driver. Among other things it lets you print as a booklet. This is very useful for compiling sheets listing electronic components. Edge does not seem to have this facility. In Firefox, you can set up a menu bar, click File, then Open to open a file. Where is this in Edge or Chrome?

Michael Dunkin

In Issue 595 Lynne Sharpe takes issue with Jonathan Parkyn for naming and shaming PDF Shaper on the basis that if you're very careful you can sidestep the unwanted junk it otherwise tries to install. But the job she's using it for – converting JPEG files to PDF – is superfluous. The PDF is merely a container for an image. It does not need converting, merely taking out. If you open the PDF in Adobe Reader, it contains a JPEG file. Click that, which highlights the image, then you can copy and paste it into *any* image editor. I've done it hundreds of times in the scenario she mentions for researching my family history.

Jim Barton

Chromebooks are 'a swindle'

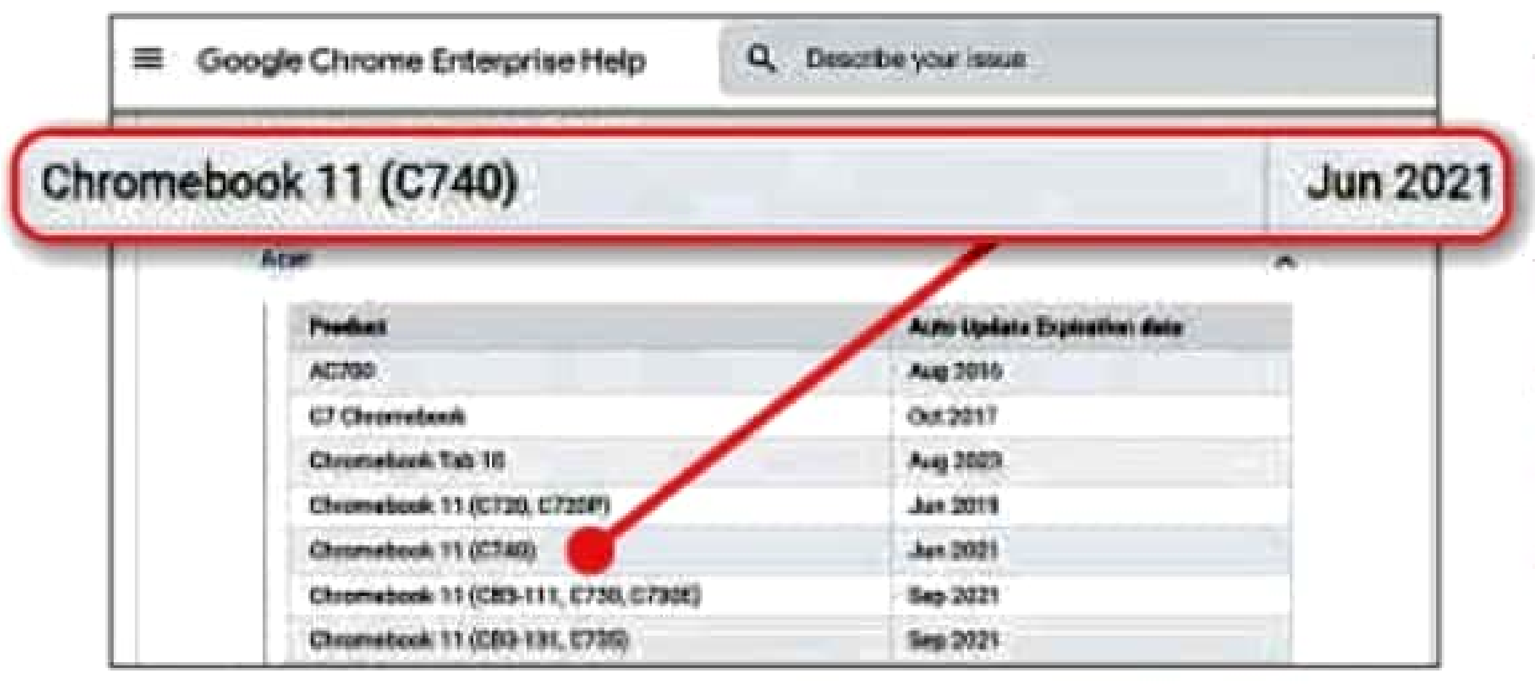
I encouraged my mother to buy a Chromebook because they're easy to use and to update. Among other things, she uses it for banking. But nowhere have I seen any mention of the fact that they have an automatic expiration date, after which Google will no longer provide updates for Chromebooks, leaving them unsafe.

She only bought the Chromebook in March 2017 and has been told that it will no longer update after June 2021. I cannot see this as anything other than a swindle. I also note that I've never seen it mentioned in your magazine.

Catherine E Carter

CA SAYS Catherine's right that all Chromebooks have a limited life – or an 'Auto Update Expiration (AUE) Date'. Each Chromebook model lasts 6 ½ years from manufacture, after which Google stops installing software updates (including security fixes), and offers no further technical support. This means the particular Chromebook Catherine's mother bought was probably made in early 2015. As she bought it two years later, she'll get just over four years of use from it before Google ends support. Like Catherine, thousands of Chromebook users have received a nasty shock when they discover the real lifespan of their device – and it is something we try to point out when reviewing them.

Visit Google's website to find out when support for your model will end: www.snipca.com/37095. Scroll down and look for the 'Google Approved Chrome Devices' heading. Next, click the make of your Chromebook (such as Acer or Dell) to see a list of model numbers, and their expiration date on the right. In our screenshot below, for example, Acer's Chromebook 11 (model number C740) will stop receiving updates from Google in June 2021 – so this might be the model that Catherine's mother bought.



Chromebook 11 (C740) Jun 2021

Product	Auto Update Expiration date
AC700	Aug 2016
C7 Chromebook	Oct 2017
Chromebook Tab 10	Aug 2023
Chromebook 11 (C720, C720P)	Jun 2019
Chromebook 11 (C740)	Jun 2021
Chromebook 11 (CB3-111, C730, C730E)	Sep 2021
Chromebook 11 (CB3-131, C735)	Sep 2021

STAR LETTER

Not everybody needs gigabit broadband

Your news story in Issue 597 (page 8) tells the true story of the UK's broadband, and the chasm that exists between the media and the Government on one side, and public reality on the other.

Over the past few years we've had authorities repeatedly tell us that without 1Gbps broadband we'll all end up living back in the dark ages. But look at your news story: Ofcom says that the take-up of gigabit broadband is "low", and that 40 per cent of people who can get 30Mbps actually choose a slower package. So, how does the Government and Ofcom square this public reluctance with the glorious benefits of gigabit speeds, which apparently we all desperately need?

In your other news story on that page you suggest the answer might be that people can't afford the faster speeds, and there's probably some truth in that. But a more profound reason is that many people are perfectly happy on speeds of around 30Mbps. It's often said that gigabit broadband will benefit families with kids who stream a lot. Well, what about older couples whose kids have left home, or those who live alone? They simply don't need it. In road terms, you're offering them a motorway when all they need is a B road to drive to the shops and back.

I think there may be a crisis point soon. Broadband providers will realise that the public desire for gigabit is far less than they thought it would be. They'll either cut back on delivering it, or be forced to offer massive discounts.

Ralph Stephens

The **Star Letter** writer wins a **Computeractive** mug!

Powerlines don't work in my rewired house

The advice in Issue 595's Cover Feature ('Get Your Fastest Ever Wi-Fi in 2021') on getting Wi-Fi via powerlines reminded me of my double failure with this system. I bought a pair of adapters about five years ago and after repeated failed attempts to connect upstairs with downstairs, I slung them in the shed and forgot about them.

A few years later BT sent me a pair of more powerful adapters, but they failed too. Intrigued, I started thinking more deeply about the problem, and remembered that about 25 years ago, when I had the whole house rewired, we had some power outages when either the upstairs or downstairs would fail, though not both at the same time.

My guess is that the electrician wired us on two separate circuits, meaning I can't use powerlines to transmit Wi-Fi around the whole house! Two more units slung in the shed.

David Edwards

Consumeractive

We stand up for your legal rights

Do I have to accept vouchers as a refund?

LEAD CASE

Q In December 2019, I bought some digital bathroom scales for £13 from Wilko (www.wilko.com). They stopped working in November last year. Wilko said that because I didn't have any of the original packaging I was entitled only to a voucher for £8 to spend with them. I thought I was entitled to the full £13. Was I wrong?

Michael Clear

A More than six months had passed since purchase, so Michael was wrong to think he was entitled automatically to a full refund. To get a full refund after this length of time, he would need to prove that an item was inherently faulty.

But his case does raise questions, such as whether retailers can force customers to accept vouchers. Also, can they deduct money from a refund when a customer doesn't have the original packaging? And if so, by how much?

The first question is easy to answer: Wilko can't force customers to accept a voucher for inherently faulty goods. Under the Consumer Rights Act, Michael is entitled to money back, not vouchers. Presumably, by offering a refund (albeit as a voucher), Wilko is accepting that the scales are faulty.

As for packaging, this applies only within the first 30 days when you're rejecting an item bought online that's not inherently faulty. If you're doing this, you need to return the item in the original box so the retailer can re-sell it. But if an item is inherently faulty, you can return it in whatever packaging you like.

Less clear is how much money retailers are allowed to deduct from a refund. The law states that firms can cut a "reasonable amount" from a refund once six months has passed to reflect how long an item has been used. Wilko's interpretation of this is to deduct £5 from Michael's refund. We've asked Wilko why it chose this figure, and said that it must give Michael some money back, not a voucher.

CASE CLOSED

Why did eBay refund person who bought my phone?

Q I recently sold a mobile phone on eBay for £27, but the buyer claimed it didn't work. I agreed to a refund only if the buyer returned the phone, but eBay went ahead and refunded him anyway after he raised a claim, and before I received the phone back (this still hasn't arrived). Why did it do this?

Rod Theobald

A We're not sure, but eBay has apologised to Rod and admitted it should have waited until it had checked whether the buyer had returned the phone. It also told Rod that if the buyer hadn't returned the phone by January, it would return the funds to him. We'll check whether this has happened.

So, why did eBay let the buyer raise a claim? Sellers tell us eBay favours buyers, while buyers say the opposite. But the way the claims process is set up means a dispute has to be filed by the buyer, through the Resolution Centre. Once Rod said he'd make a refund, the buyer should have closed the case – though some people do keep cases open because they can't be reopened once closed.

CASE CLOSED

CASE UPDATE

PayPal snubs reader so we'll send proof of delivery

Once again, we're left scratching our heads at PayPal's refusal to provide a refund – and it's all the more frustrating because the reader sent the information PayPal needed.

In Issue 593 we explained how PayPal refused to refund Carolyne Sheehan the £17.43 she spent buying a hydro power washer from a Chinese firm. In an echo of Clive Bonner's case opposite, she actually received a garden hose adapter (similar to the one pictured).

She then returned the item to China and asked PayPal for her money back, but it closed the case without refunding her because it said she hadn't provided tracking details. We're surprised that PayPal abruptly closed her case without asking Carolyne for this information. It told us that the claim "was closed in the seller's favour because we could not confirm that the item had been delivered back to them".

However, Carolyne told us that she *had* provided this information, and can prove it. We've asked her to send this proof to us so we can use it to argue her case when we contact PayPal. Despite the company's inflexibility, we're not giving up on her case, nor on the many others that we're currently investigating. PayPal has let down a lot of readers recently with poor decisions. We'll continue to fight your corner.

Contact us so we can investigate your case

Email: consumeractive@computeractive.co.uk
Please include your name, phone number and address.

I got wrong item, so why did PayPal not refund?

Q Last August I paid £21.47 through PayPal for a laser-cutting tool from a Chinese company called Letvioe. After a long delay, it actually sent me a small camera tripod made of plastic!

I got no sense when I contacted the seller, so I raised a complaint with PayPal. However, my claim was refused because the seller showed that an item (albeit the wrong one) had been delivered. Can you help?

Clive Bonner

A We'll try, because Clive's definitely due a refund. Yes, he received an item, but it was not as described, and therefore under PayPal's Buyer Protection he should get his money back. We'll point this out to PayPal, along with dozens of other complaints we've had about the payment service.

PayPal may have wanted Clive to return the item to China before issuing a refund, though it didn't say so. Its policy is to refund the cost of returning items up to £15.

You can appeal a decision to PayPal's complaints department (www.snipca.com/37039). The company aims to reply within 15 days for "payments-related complaints" and eight weeks for other types.

If that doesn't work, you could try the Financial Ombudsman (www.financial-ombudsman.org.uk). Although PayPal isn't based in the UK, it volunteered itself to be regulated by the ombudsman (as explained at www.snipca.com/37040).

CASE ONGOING

Have I been conned by Currys over £200 warranty?

Q I ordered a new Sony TV from Currys and so I thought my contract was with the retailer. However, I was told by a sales assistant at Currys that if anything went wrong, I'd have to approach Sony for help. Currys said it would help only if I bought an extended warranty for £200, which I did. Have I been conned?

Trevor Ellis

A We wouldn't say Trevor has been conned, but the sales assistant certainly doesn't know consumer law. Trevor is correct that under the Consumer Rights Act (CRA) his contract is with the retailer (ie, Currys), which means that it has to fix the TV should it prove faulty. Currys gave him misleading information by saying that he'd receive help only if he bought an extended warranty. This is completely untrue, and could count as a breach of the Unfair Trading Regulations. We've contacted Currys for a response.

BRAVIA
Currys
androidtv

By law, Currys should have also told Trevor about the extended warranties website (www.compareextendedwarranties.co.uk), where he can compare the costs of warranties provided by other companies. If Trevor changes his mind about the warranty, he can demand a full refund within 45 days under the Supply of Extended Warranties regulations. Even if he'd used it, he'd still be entitled to a pro-rata refund if the warranty was for more than a year.

The only contract Trevor has with Sony is if it offered a free manufacturer's warranty. If Trevor wants to use this instead of the CRA, Sony is legally bound by the terms and conditions.

CASE ONGOING

CREDIT WHERE IT'S DUE

Wired2Fire fixed my monitor in my porch

A couple of months ago, the hard drive on my old PC failed. This gave me the excuse to buy a new machine from Wired2Fire (https://wired2fire.co.uk), following a review in *Computeractive*.

After setting it up, I found that one of my two monitors wouldn't work. I rang the company, who immediately checked their records to find that a second DVI socket needed to be added. I live 20 miles from their factory in Dorking, Surrey, and two hours later one of their engineers arrived at my house in the pouring rain and added the appropriate card to the PC. He did this while standing in my porch, because my wife and I are in the vulnerable Covid category. He then rang me from his car and talked me through the procedure to get my monitor set up. I thought that was great customer service.

Trevor Sykes

Has a company impressed you with its customer service? Please let us know: editor@computeractive.co.uk

Contact Wired2Fire

- **Email** sales@wired2fire.co.uk
- **Phone** 01306 882211

Grow Your Family Tree

If your overgrown family tree needs pruning, grab your virtual secateurs and follow **Nick Peers'** advice to...

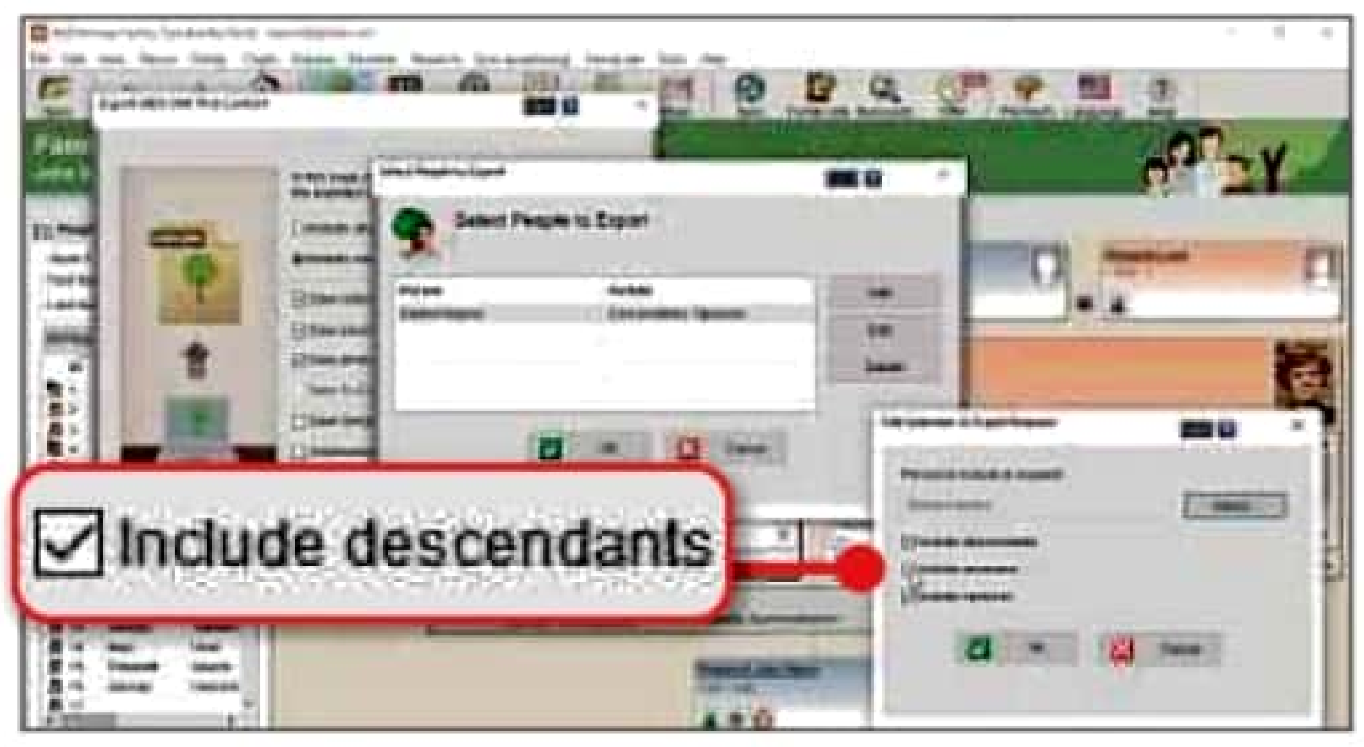
Remove multiple people in one go

Reader Keith Moody's MyHeritage tree has grown too many branches. He wants to cut dozens of distant relations from it in one go. Can it be done? Sadly, no. As with many online trees, on MyHeritage you can only remove people individually, which can take a long time.

Export your tree, *then* remove unwanted people

However, we found a workaround with MyHeritage Family Tree Builder (www.myheritage.com/family-tree-builder), a free Windows program that ties into your MyHeritage online account. The software lets you export a copy of your family tree in GEDCOM format containing only individuals you select from your existing tree. You can then upload this new tree without all the unwanted people.

To do this, choose File then 'Export GEDCOM'. Work your way through the instructions to the 'Pick Content' screen, then select 'Include only selected people' to open a new window that will list everyone in your tree. Click someone, and they – along with their spouse and descendants – will be added to the selection. You can then click Add to keep adding more people, or click Edit next to someone you've added to include their parents and grandparents (but not uncles, aunts, siblings, or cousins) by ticking 'Include ancestors' (see screenshot above).

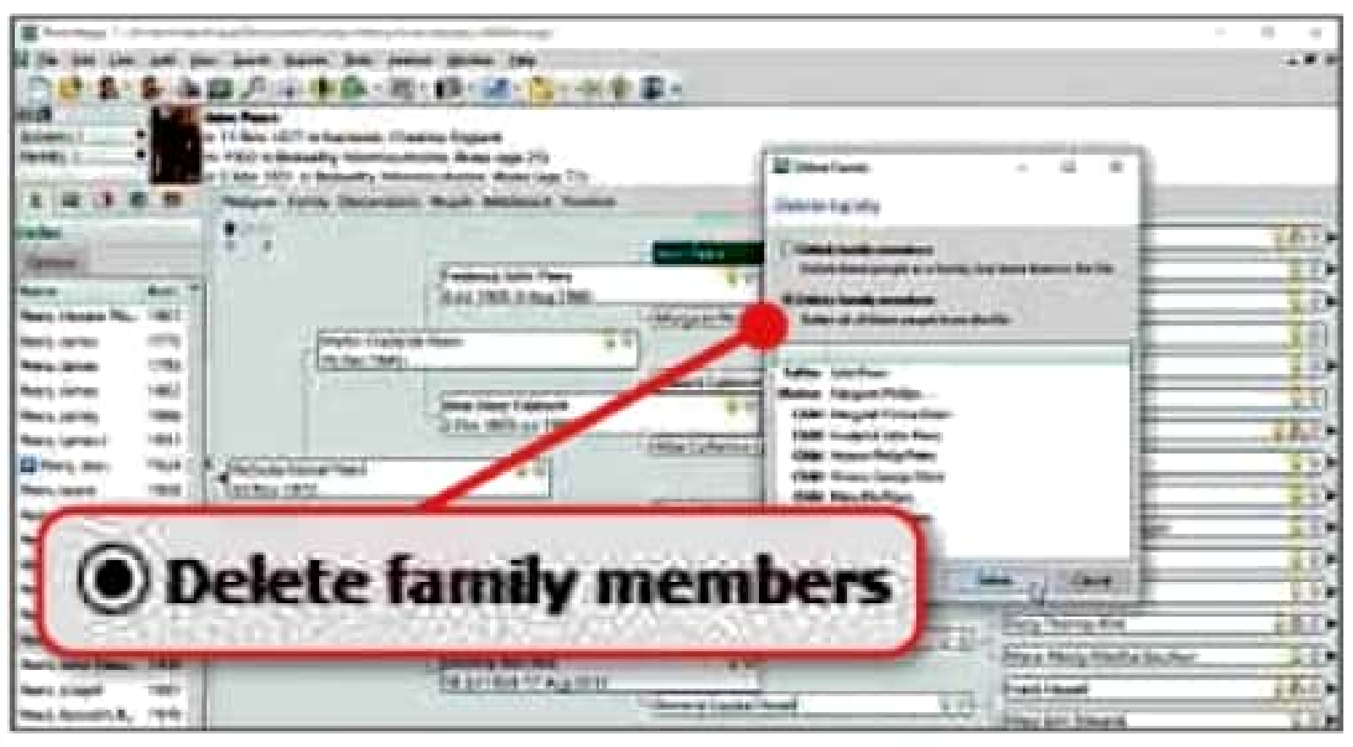


Tick 'Include ancestors' to add parents and grandparents to an individual

Once the file has been exported, use Family Tree Builder's File, 'Import GEDCOM file' option to import the tree into the program as a new tree, then sync it to your online MyHeritage account. Both trees should happily co-exist, letting you go through the new tree checking that the people you want to keep are present and correct (if they aren't, try exporting again with a different set of people). Once you're happy the new tree has everyone you need, delete the old one.

Delete ancestors and their close relatives

Other programs are more accommodating than Family Tree Builder. For example, RootsMagic (www.rootsmagic.co.uk) users can right-click any individual in their tree and choose Delete Family, then select 'Delete family members' (see screenshot above) to remove all the people shown: the selected individual, their spouse and their children. Grandchildren are left untouched, so this method works best when you start at the bottom of your tree with the most recent generations and work your way upwards. RootsMagic users can also remove entire families at once, but again make sure you work from the bottom up.



Select 'Delete family members' to remove a person and all their immediate relatives

Better is the Named Lists tool in Family Historian (www.family-historian.co.uk). Start by choosing View, followed by Record Lists, Individuals to generate a list of everyone in your tree. Next, select Lists, Named Lists Pane to show the Named List on the right of the screen. Right-click inside this and choose 'New List...'. Name it 'People to remove', then click Create.

The list will be automatically selected – all you need to do is drag all the people you want to remove from it on the left into the right-hand pane. When you've finished adding people, right-click the 'People to remove' list and choose Delete Listed Records to exclude those people.

If your program doesn't offer a direct option for deleting multiple people, check its GEDCOM-export tools instead. These should allow you – like Family Tree Builder – to choose exactly who to include in your exported GEDCOM file.

Your **Genealogy** Problems Solved ☑

Is there an option in Chronoplex Software's free My Family Tree tool to help me find 'orphaned' individuals in my family tree?

David Price

In genealogical terms, 'orphans' aren't people without parents, but individuals with no links to anyone else in your tree. In My Family Tree, select Tools, Manage Trees and you'll see these orphans listed beneath your main tree. Highlight an orphaned person from the list, click Go To, select the 'Create relationship' dropdown menu and then choose 'Connect family member' to select a parent, sibling, spouse or child from your main tree to link them back in.

✉ **Have a genealogy question for Nick? Email letters@computeractive.co.uk with 'Grow Your Family Tree' in the subject line.**

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Will Stapley recommends new programs that won't cost you anything

MEDIA STREAMING

Universal Media Server 10

www.snipca.com/37140

What you need: Windows 7, 8.1 or 10

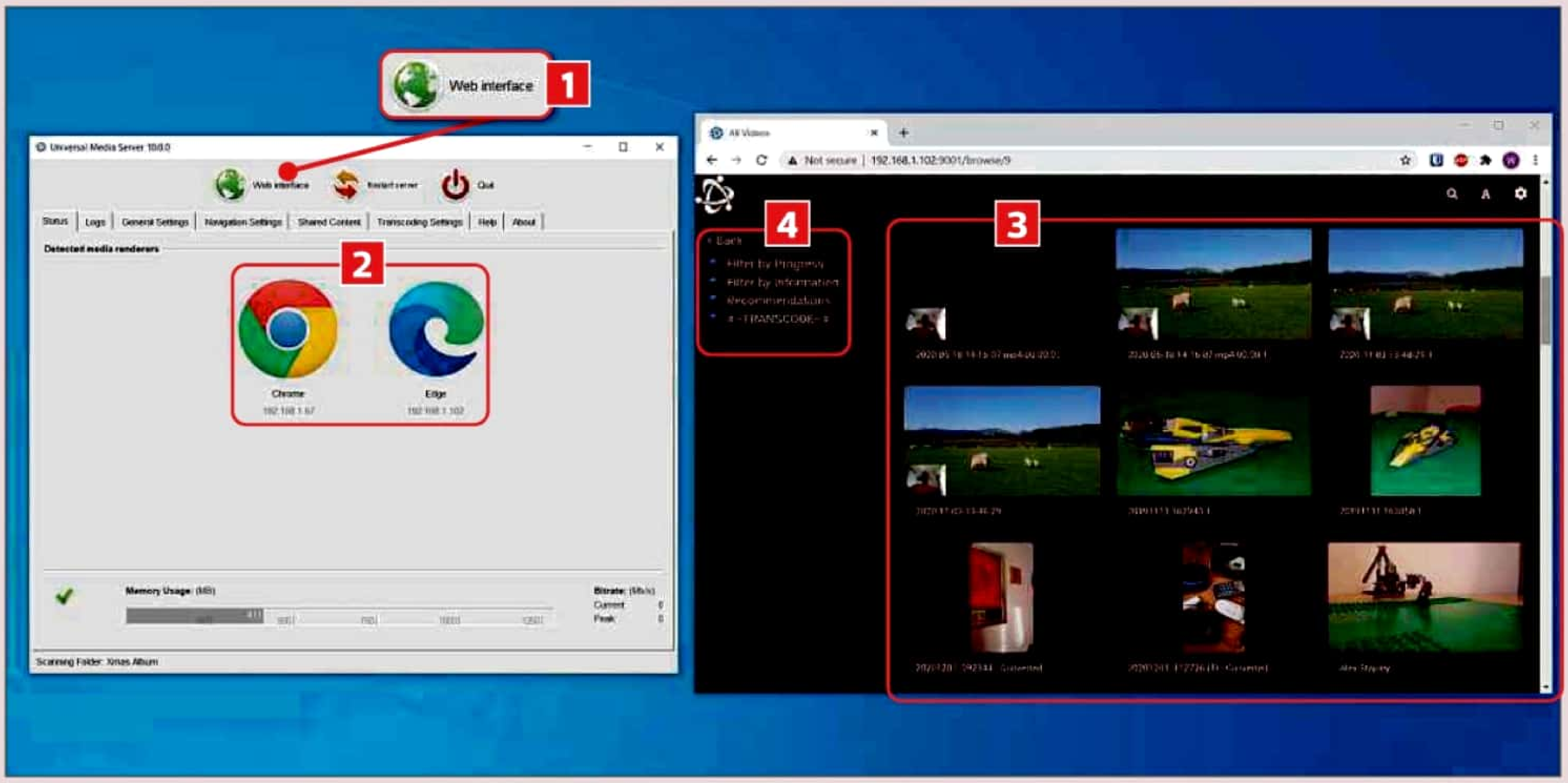
Universal Media Server (UMS) is a streaming tool that takes the photos, videos and music stored on your PC, and lets you access them on devices connected to your home network. In our Cover Feature in Issue 590 (page 50) we explained how Plex (www.plex.tv) also does a similar job. So what does UMS offer that Plex doesn't?

For starters, UMS is open-source and free, so – unlike with Plex – you won't be nagged to upgrade to a paid-for version. UMS also has some unique features, including displaying subtitles in videos even if the device you're watching on doesn't support them (UMS will add these before streaming begins).

Version 10 adds two new folders that you'll see when browsing your video collection. The 'Filter by Progress' folder lets you quickly find videos you've not yet watched, while with the 'Filter by Information' folder you can sort videos based on metadata, such as release date, genre and actor. The menus also now have breadcrumbs at the top (showing which folder you're currently in, as well as its parent folders), letting you quickly jump between them.

You can decide which content you want to share across your network – open UMS, click the Shared Content tab, then add the folders you want to share. As well as accessing your media library on other computers and smart TVs, you can also use any device with a web browser – such as a tablet or phone (see below). You will, however, need to ensure the PC that has UMS installed is switched on.

Our only complaint is that, despite recent updates, the design feels dated, especially when compared with Plex.


Web interface
1
Universal Media Server 10.0.0
Web interface
Restart server
Quit
Status
Logs
General Settings
Navigation Settings
Shared Content
Transcoding Settings
Help
About
Detected media renderers
2
Chrome
Edge
Memory Usage: (MB)
Bitrate: (Mb/s)
Current
Peak
Scanning Folder: Xmas Album
All Videos
Not secure | 192.168.1.102:9001/browse/9
4
Back
Filter by Progress
Filter by Information
Recommendations
#--TRANSCODE--#
3

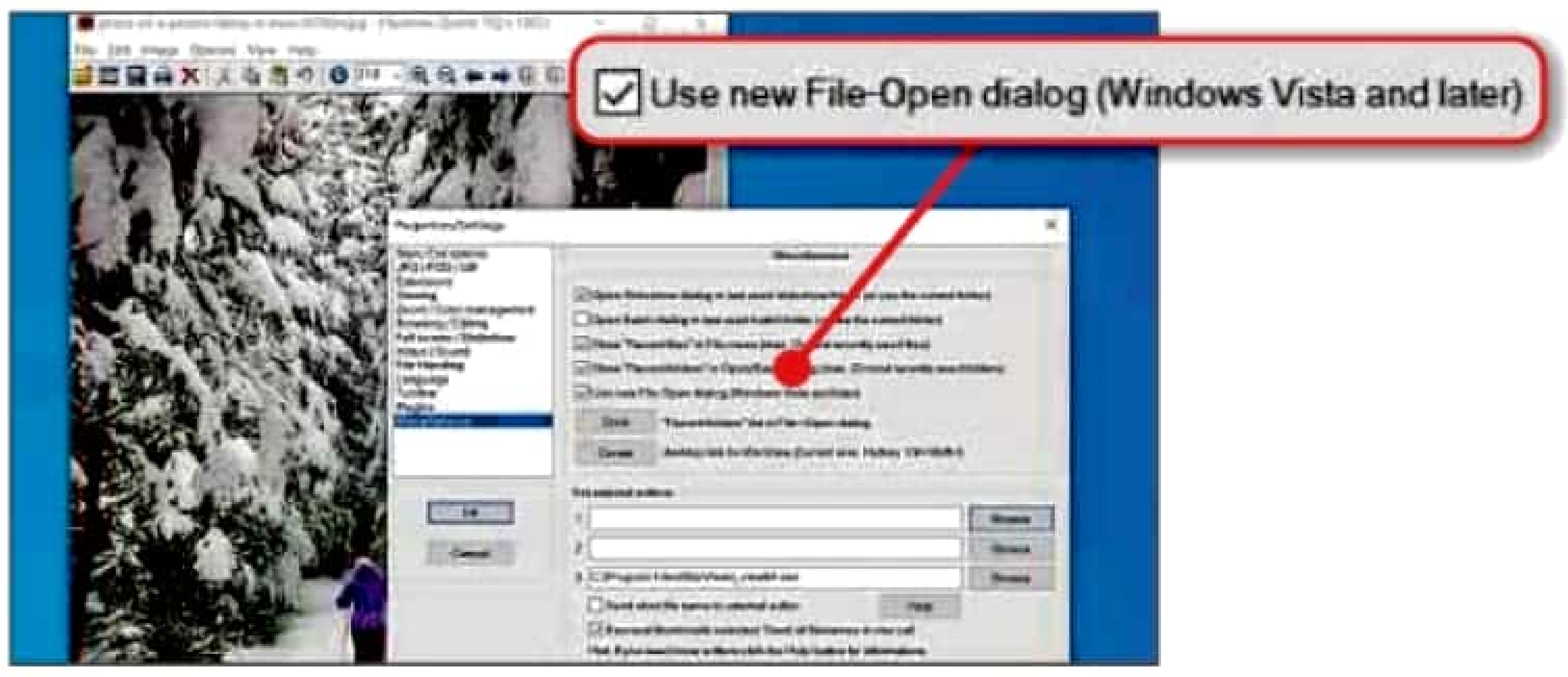
1 You can access your media library on any device with a browser. Click this button in the UMS program on your PC, then copy the web address to whichever device you want to access it on.

2 When a device connects to your media library, you'll see it listed here. In our example, we're connecting to it from an Edge browser on our PC and the Chrome app on our phone.

3 In the web interface, you can browse your entire media library, with each file displaying as a thumbnail.

4 Version 10 includes new folders, letting you filter videos based on whether you've watched them and by the metadata they contain.

IMAGE VIEWER


☑ Use new File-Open dialog (Windows Vista and later)

IrfanView 4.57

www.irfanview.com
What you need: Windows 7, 8.1 or 10

IrfanView is an easy-to-use image viewer that also lets you apply basic edits to your photos (such as rotating and cropping). We particularly like the tool's wide selection of keyboard shortcuts, meaning you don't have to constantly reach for your mouse when browsing photos (sadly there's no shortcut to actually *view* these shortcuts – you have to click Help, then Keyboard Shortcuts).

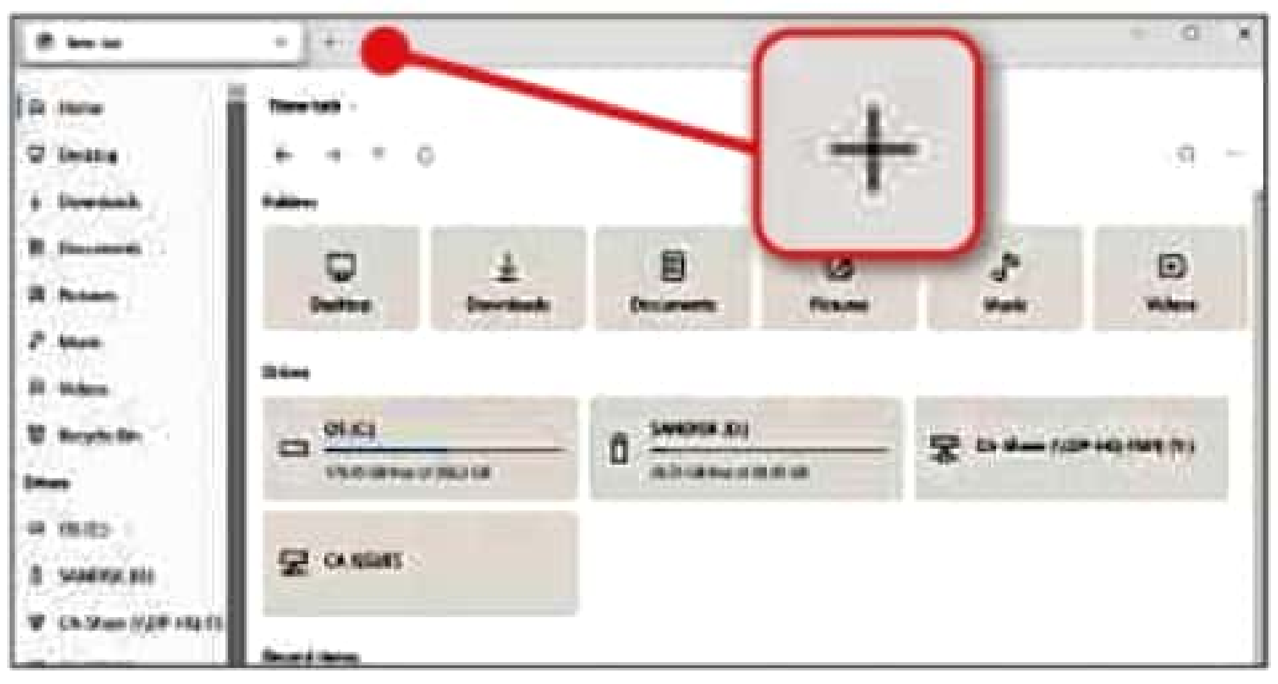
One complaint we've previously levelled at IrfanView is that its design feels very dated, particularly its old Windows 7-style tool for browsing your files. Version 4.57 addresses this by updating the browsing tool, but you have to enable it – click Options, 'Properties/Settings', select the Miscellaneous tab and tick 'Use new File-Open dialog...' (see screenshot).

FILE MANAGER

Files 1.0

www.snipca.com/37131
What you need: Windows 10

Microsoft is in the process of giving its apps what it calls a 'Fluent' design, adding translucent windows and a sense of depth to icons (see page 49, Issue 597). You can see this in the Settings, Calendar and Mail apps, but not yet in File Explorer. To change its design to a Fluent style, try this third-party program. As well as a different design, it adds features File Explorer lacks, including opening multiple tabs - click the '+' button at the top (see screenshot). Click the cog icon at the bottom and you can change settings, including turning on one-click opening for files and choosing which folder to view when you open the app. We're hoping a future release will let you view multiple windows using a split-screen mode, but for a first release this is a very impressive alternative to File Explorer.



WHAT SHOULD I DOWNLOAD?

We tell you what software & apps to use

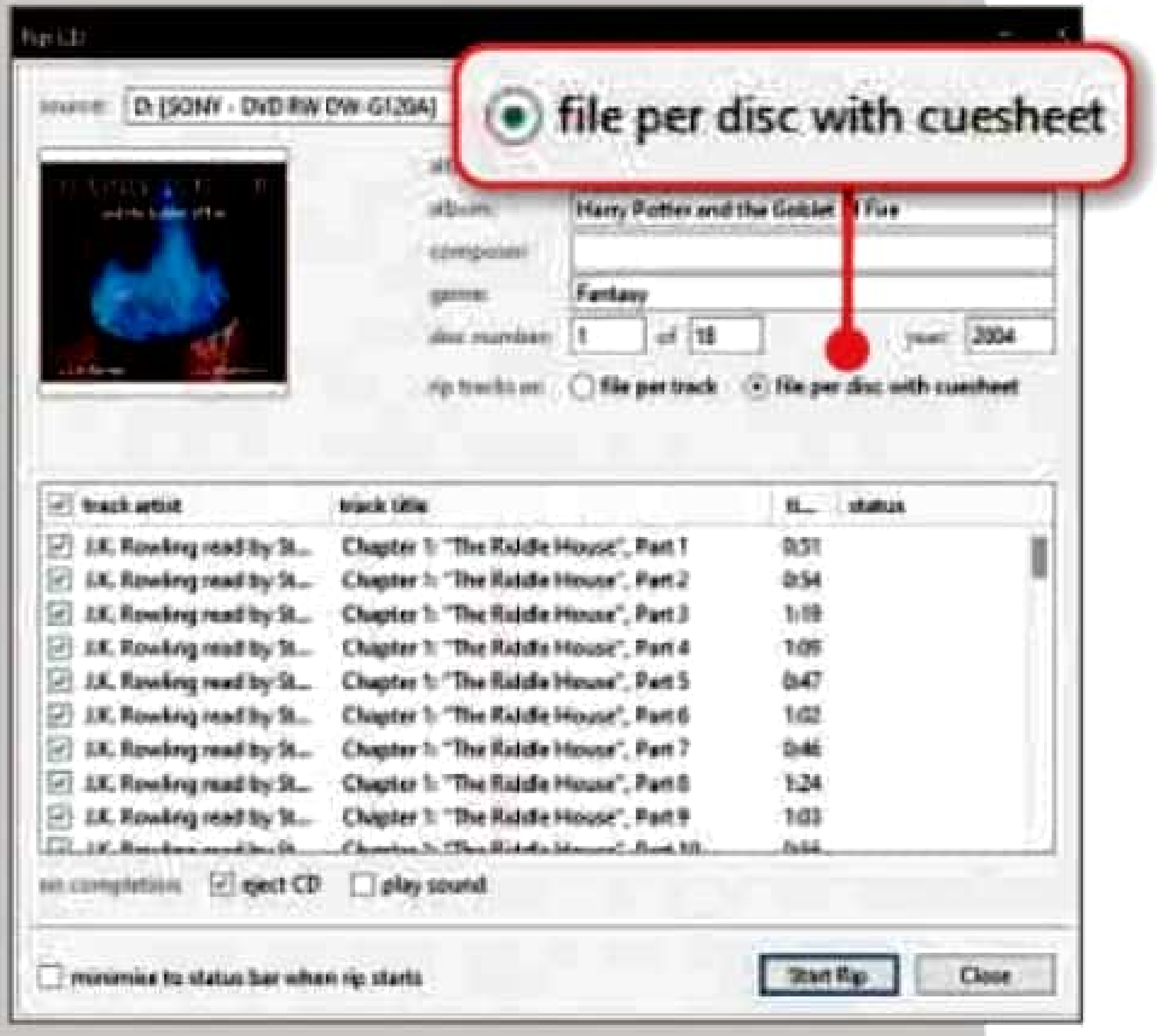
What can I use to rip CDs as a single file

Q Can you recommend a tool for ripping CDs containing a series of talks? At present, I am using Ashampoo Burning Studio, but it assumes I'm ripping music, so it splits the talks into tracks which I then have to merge into one using a separate tool.

Leon Davison

A Although primarily intended for *playing* audio files, MusicBee also has a hidden ripping tool that does just what you're after. First, download and install MusicBee from www.snipca.com/37130 (click Get MusicBee Installer). When you run the program for the first time, it will prompt you to scan for music on your PC, but you can skip this if you only want to use it to rip CDs. Make sure the CD you want to rip is inserted into your PC's disc drive, then press Alt to reveal the MusicBee menu, then select Tools, followed by 'Rip CD...' (or just use the Alt+R shortcut).

In the window that opens, select 'file per disc with cuesheet' (see screenshot) – this tells MusicBee to rip the entire CD as a single audio file. Before continuing, click the Settings button at the top. In the 'Encode as' box, you can choose which format you want to use. We suggest leaving this at the default of MP3, which offers a good balance between quality and file size. If you want the best sound quality, and are happy to have larger files, select FLAC. Click 'Save' when you've finished. Type information in the 'album artist' box, then click Start Rip.


◉ file per disc with cuesheet

source: D: [SONY - DVD RW DW-G120A]
album: Harry Potter and the Goblet of Fire
composer:
genre: Fantasy
disc number: 1 of 18 year: 2004
rip tracks as: ○ file per track ◉ file per disc with cuesheet

☑ track artist	track title	ti...	status
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 1	0:51	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 2	0:54	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 3	1:18	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 4	1:09	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 5	0:47	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 6	1:02	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 7	0:46	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 8	1:24	
☑ J.K. Rowling read by St...	Chapter 1: "The Riddle House", Part 9	1:03	

on completion: ☑ eject CD ☐ play sound
☐ minimise to status bar when rip starts

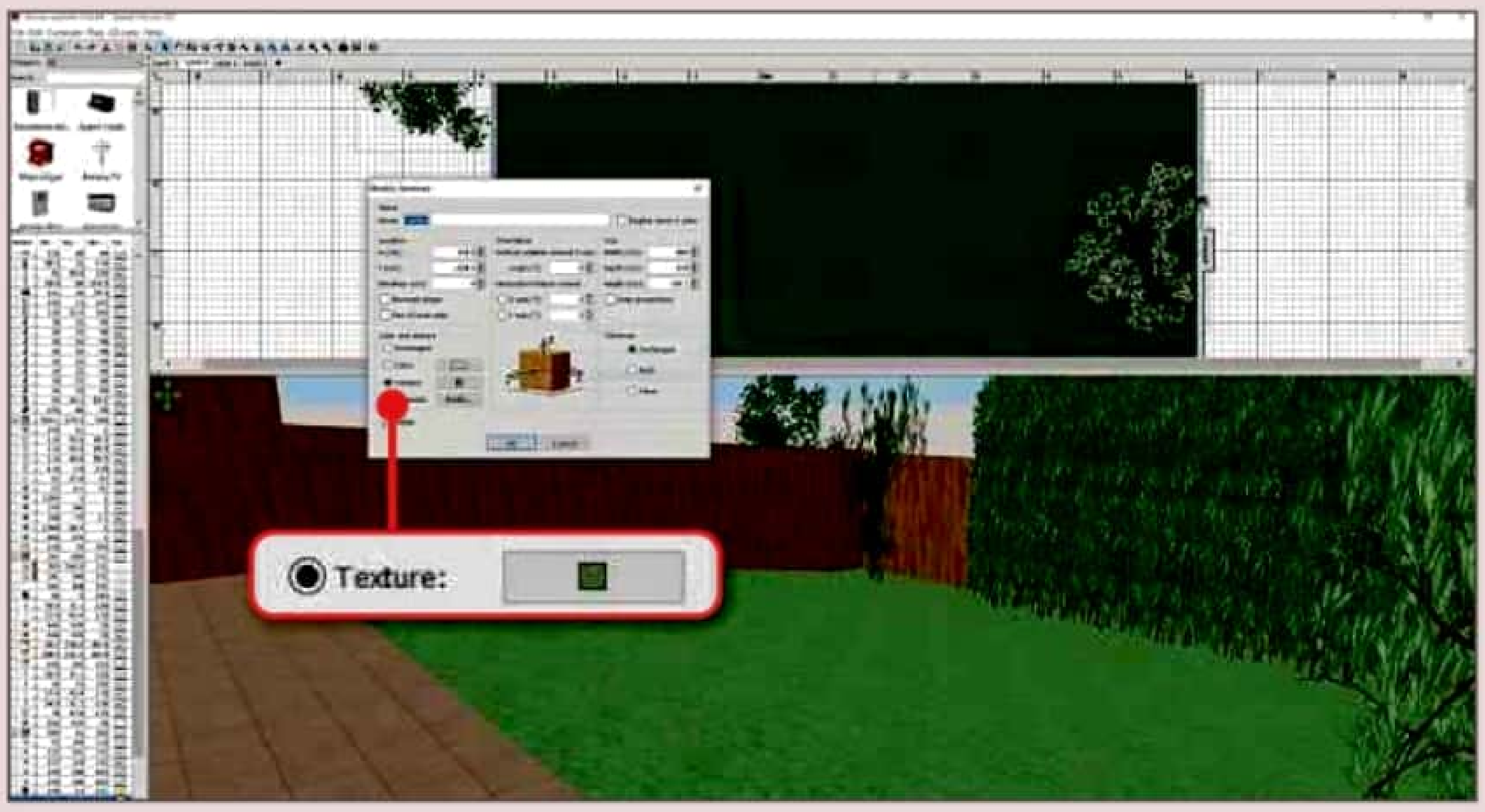
You can also use this method when ripping audiobook CDs, which often contain hundreds of individual tracks, making them hard to manage. The CD will rip to a single audio file, but MusicBee also creates what's known as a cuesheet (a file that contains bookmarks for each track). MusicBee – and most other players – will then use this cuesheet to display the recording as individual tracks, letting you quickly jump between chapters.

Do you need our advice on what software to use? Just email us at letters@computeractive.co.uk

HOW I USE...

Sweet Home 3D for landscaping

Will Stapley reveals how he recreated his sloping garden



Once you've imported your garden as an object, you can add a texture to it

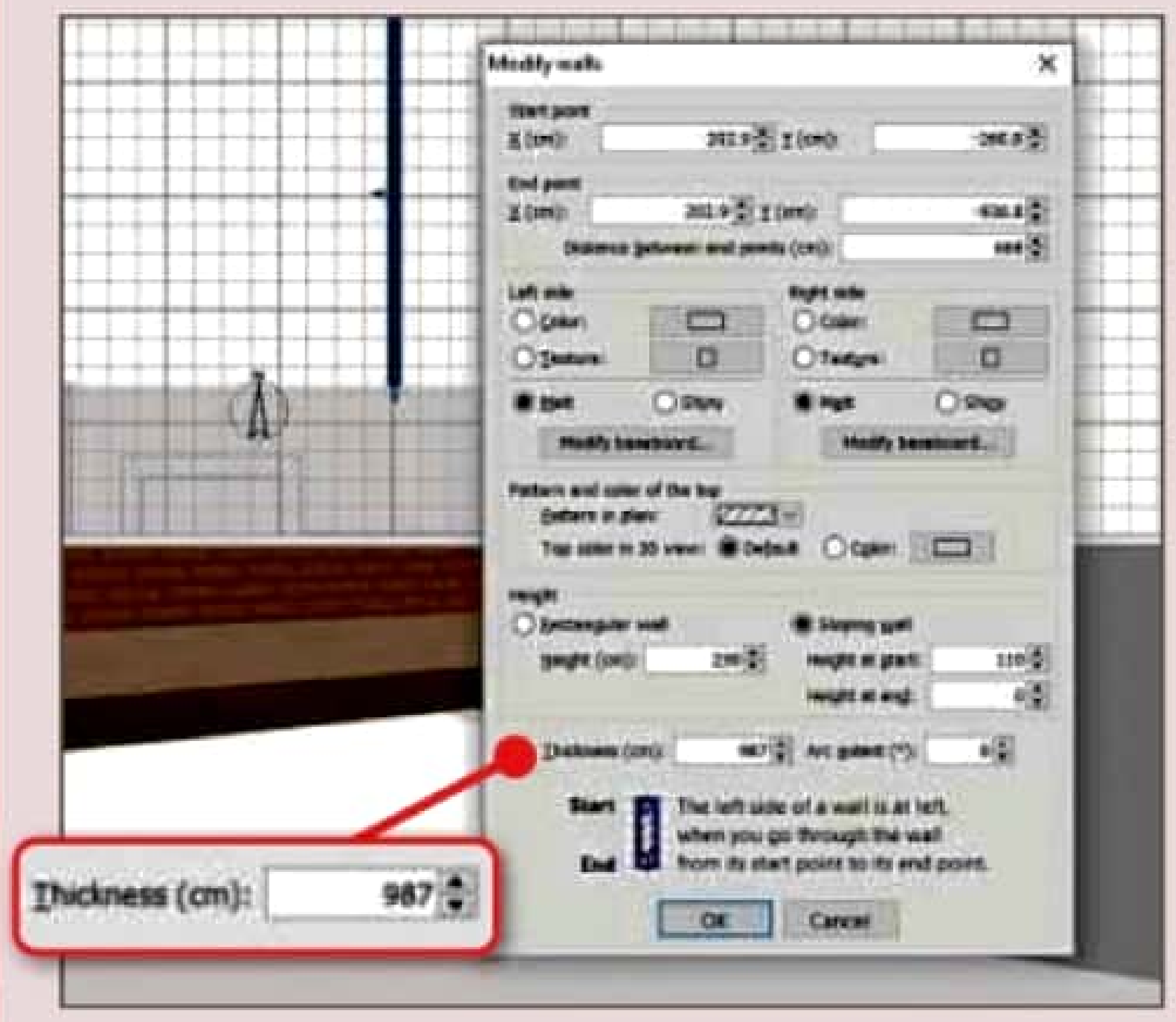
Regular readers will recall how last year I used Sweet Home 3D (www.snipca.com/37124 – click the turquoise Download button) to plan a play area in the lounge for my kids (see Issue 556, page 20).

Having spent more time in my home over the past year than ever before, I've once again turned to Sweet Home 3D to plan some improvements, but this time concentrating on my garden. If it were level, I could have done this quite easily by creating a room without walls and giving it a grass texture. Sadly, my garden is anything but flat.

As well as adding an unusual edge to games of football with the kids, the slope also makes it harder to recreate in Sweet Home. However, after many attempts, I managed to wrestle the tool into submission. It's not the simplest of processes, so you might want to grab a stiff drink before continuing.

First, I created a new level for my garden by pressing Ctrl+Alt+N, then opened the properties for my existing ground-floor level (Level 0) by double-clicking its tab (located above the floorplan). I then changed its elevation to match the difference in height between the top and bottom of my garden (110cm). Next, I selected my new level (to make things easier, I renamed this Garden) and created a wall that matched the length of my garden by pressing Ctrl+Shift+W, then clicking and dragging the wall on to my floorplan. The size is displayed as you drag, but I find it's best to create a small wall, press Escape, switch to the Selection tool (Ctrl+L), then double-click the wall to open its properties. From here, I entered my garden's precise length in the 'Distance to end points' box.

Staying in the properties window, I changed the Thickness setting of the wall to match the width of my garden (see screenshot left). To add the slope effect, I selected 'Sloping wall' in the Height section, then entered 0 in the 'Height at start' box, 110 in 'Height at end' and clicked OK.



Use the Thickness setting to set the width of your garden

I now had a basic sloping garden effect, but because I'd created it using the Wall tool, Sweet Home wouldn't let me place objects on it (such as trees and shrubs), nor give it a grass texture. To do this, I needed to convert the wall to what Sweet Home calls an 'object'. After selecting the wall, I opened the '3D view' window and selected 'Export to OBJ format...', choosing 'Export selection' when prompted (this meant only the selected wall is exported as an object, not my entire home).

I now had to import the object. To do this, I opened the Import tool (Ctrl+Shift+I), selected my garden object, then left the various import settings at their defaults. My garden now appeared on my plan as an object, meaning I could double-click it and add a grassy texture, as well as recreate the plants I've randomly plonked in it over the years (see screenshot above).

With my garden perfectly recreated (or thereabouts), I can test out all kinds of slope-taming options, including a full-on levelling approach with retaining walls. Of course, whether any of my ambitions see the light of day remains to be seen, but I can at least take virtual strolls around them.

WHAT I'D LIKE TO SEE IN SWEET HOME 3D

The approach I've taken to creating my sloping garden is a little convoluted. Although I appreciate Sweet Home 3D is primarily designed for creating house plans, I'd like to see a dedicated garden tool to make the process of adding gardens easier, particularly sloping ones like mine. Of course, if you know of an easier way to do it, get in touch at letters@computeractive.co.uk.

Next issue: How I use...DuckDuckGo

Named & Shamed

Jonathan Parkyn puts the boot into tech villains, jargon-spouting companies and software stuffed with junk

WARNING: JUNK AHEAD

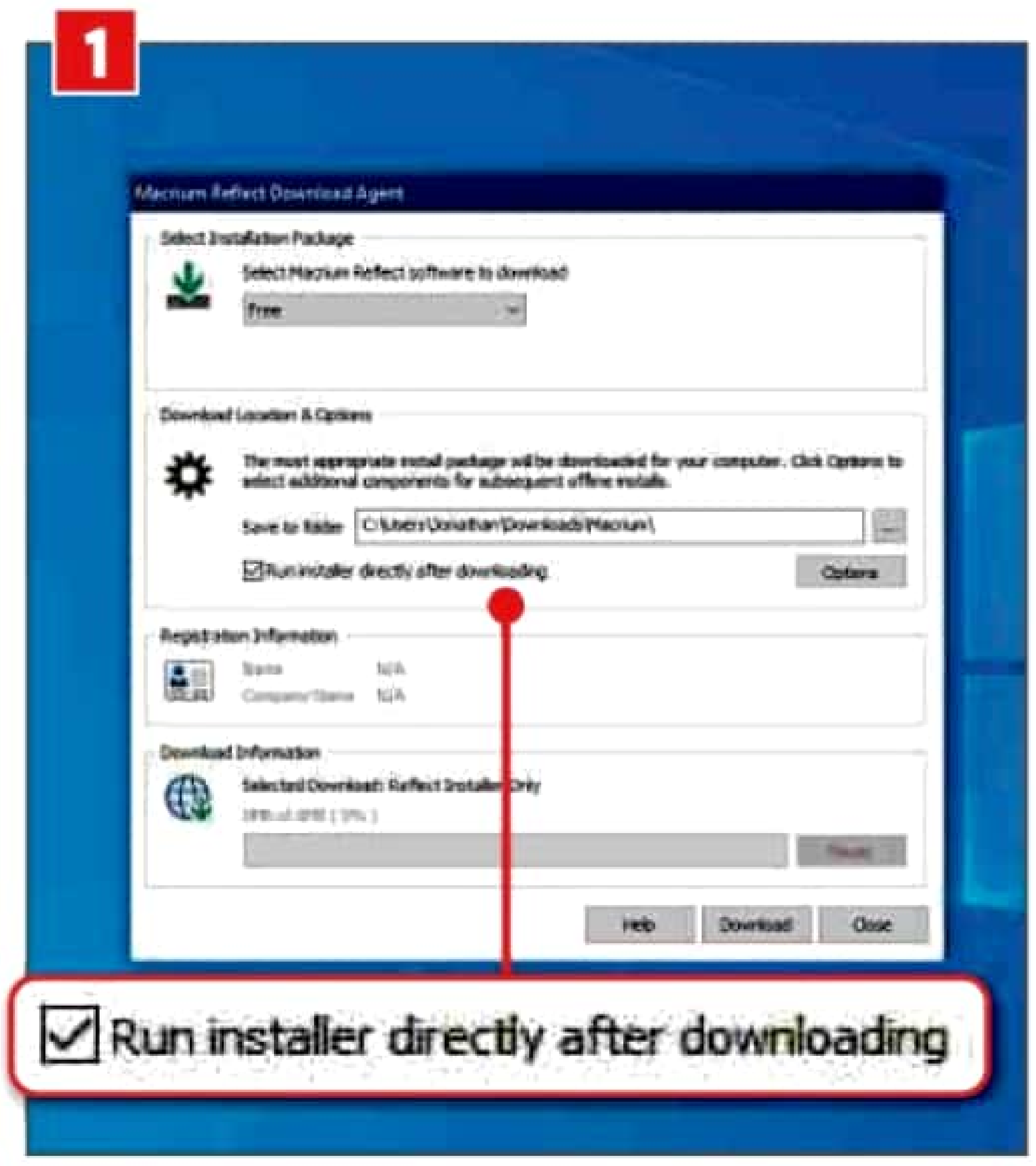
Junk offender:
Macrium Reflect Free

I'm disappointed to report that another of my favourite free tools – backup software Macrium Reflect Free – seems to have jumped on the junkwagon.

Head to www.macrium.com/reflectfree and click the Home Use button. You'll then see a confusingly worded screen that presents you with three steps ('1 Enter Email, 2 Add Details, 3 Check Email'), with a box underneath for you to enter your email address. But it's very easy to miss the fact that it's optional to provide your email at this point – you can click Continue without entering anything in the box.

The next bullet is harder to dodge. Run the file you downloaded and you'll discover that it isn't, in fact, Macrium Reflect at all, but a download manager (see screenshot **1**) – a completely separate tool that's required to download Macrium Reflect. Admittedly, this tool takes up only 5MB of your hard-drive space, but it makes the process convoluted and (unless you remember to manually delete the download manager once you've installed Macrium Reflect itself) leaves you with clutter on your PC.

1



Macrium Reflect Download Agent

Select Installation Package

Select Macrium Reflect software to download: Free

Download Location & Options

The most appropriate install package will be downloaded for your computer. Click Options to select additional components for subsequent offline installs.

Save to folder: C:\Users\Jonathan\Downloads\Macrium\

☑ Run installer directly after downloading

Registration Information

Name: N/A

Company Name: N/A

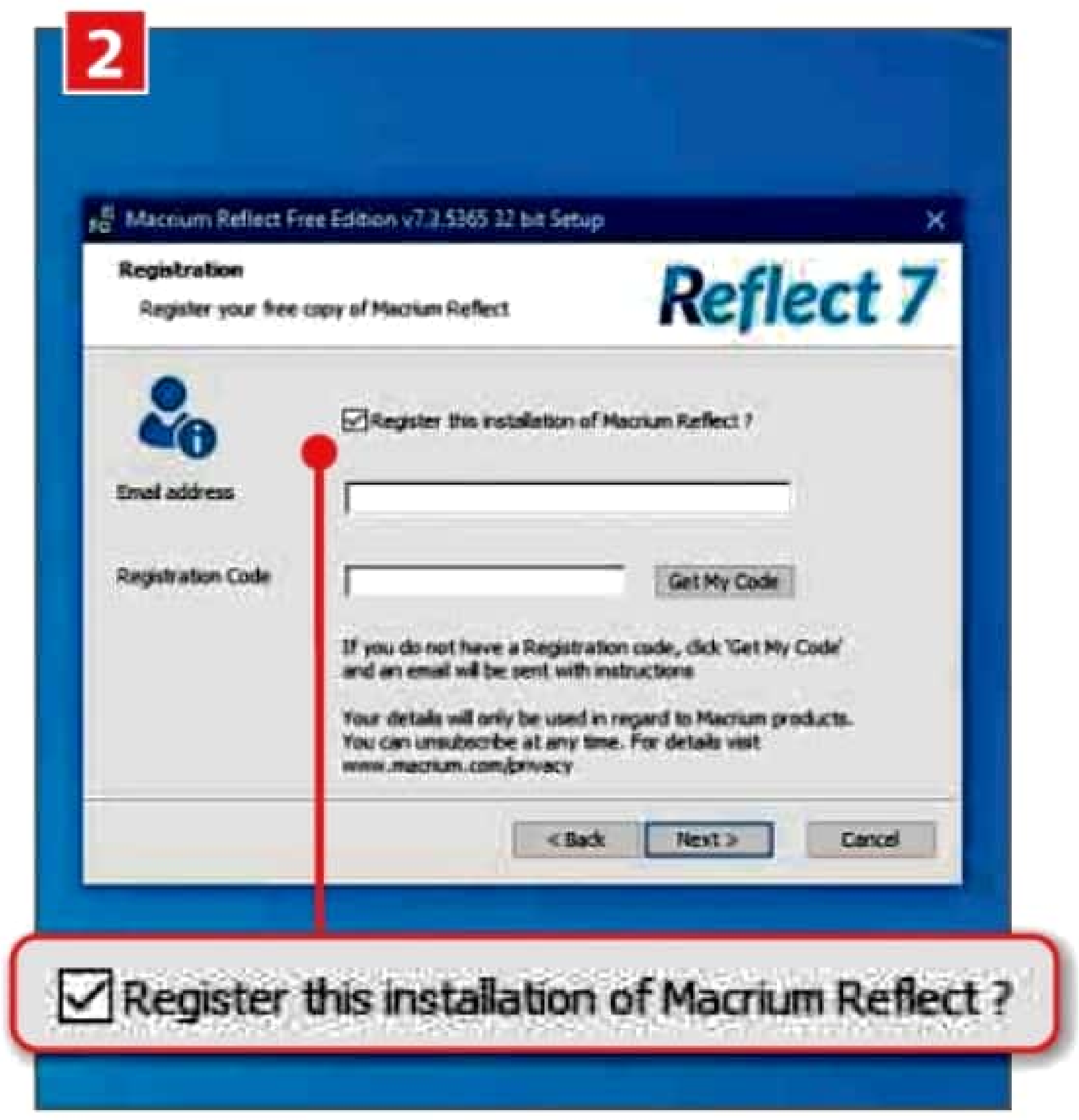
Download Information

Selected Download: Reflect Installer Only

☑ Run installer directly after downloading

You need to use Macrium's Download Manager to get its Reflect software

2



Macrium Reflect Free Edition v7.3.5365 32 bit Setup

Registration

Register your free copy of Macrium Reflect

☑ Register this installation of Macrium Reflect ?

Email address:

Registration Code:

If you do not have a Registration code, click 'Get My Code' and an email will be sent with instructions

Your details will only be used in regard to Macrium products. You can unsubscribe at any time. For details visit www.macrium.com/privacy

☑ Register this installation of Macrium Reflect ?

Untick this box to get Reflect Free without handing your email address to Macrium

To add insult to injury, once you've finally been able to launch Macrium Reflect's *actual* installer, you'll be presented with another Registration screen containing a poorly worded demand for your email address. Again, this turns out to be optional. It's not obvious, but unticking the 'Register this installation of Macrium Reflect?' option (see screenshot **2**) and clicking Next will allow you to sidestep this.

Despite these irritants, I still think Macrium Reflect Free is a worthwhile program. But I'm saddened that it has opted for such a pointlessly complicated installation process. The multiple attempts to grab your email address, meanwhile, are just downright sneaky.

WHAT ARE THEY TALKING ABOUT?

WHAT THEY SAY

Sebastian Seung, head of Samsung Research
www.snipca.com/37099

"Our innovations are designed to provide more personal and more intuitive experiences that express your personality. We're hard at work to bring you next-generation innovation, with AI as the core enabler, for your better tomorrow."

WHAT THEY MEAN

Getting back to normal means selling you even more products you'll never need.

JONATHAN'S VILLAIN OF THE FORTNIGHT

Blake Paterson

Blake Paterson is a modern version of the dodgy second-hand car salesman. Except his vehicles weren't for sale on some squalid forecourt – they were all listed on professional-looking car dealership websites, complete with fake reviews from satisfied 'customers'. Between 2013 and 2017, the 36-year-old fraudster from Westerham in Kent managed to con around 200 victims into paying for non-existent motors, pocketing more than £1million.

Police discovered that Paterson had continued to run the scam through his phone while in prison for a separate offence in 2016. In December, he pleaded guilty to two counts of conspiracy to commit fraud and one of money laundering, and was sentenced to seven and a half years behind bars. Let's just hope someone keeps an eye on his phone privileges this time.

Reviews

New products tested by our experts

LAPTOP | **£1,242** from HP www.snipca.com/37041

HP EliteBook 840 G7

AMD 5, Intel 0

Although the model number of this EliteBook 840 G7 looks as if it's five steps behind the EliteBook 845 we reviewed in Issue 597, it's an illusion created by HP's product-numbering system. In fact, the laptops have one key difference, with this model (and other models with a zero at the end of their number) coming fitted with an Intel processor, while the 845 (and other models ending in a five) come with AMD processors. The model we've tested here comes with an Intel Core i7-10510U chip.

> "Stylish design and a brilliant screen, let down by performance and battery life"

Aside from the processor, the laptop has a similar configuration to the EliteBook 845, with 16GB of memory but a larger 512GB SSD. We were keen to run our benchmark test to see how the two compared and it confirmed that AMD's processors are outpacing Intel's at the moment. This laptop got an overall benchmark score of 150, while the 845 scored 231 in the same test. That's a significant drop in performance for this model. It also seems to eat up more power, lasting 8 hours 38 minutes in our battery test, compared with 12 hours 43 minutes.

The laptop comes with a brilliant 14in IPS screen, with a maximum brightness of 820cd/m2, bright enough to be clearly viewable in most lighting conditions. It recorded an sRGB coverage of 96.5 per cent, which shows that it's good at reproducing accurate colours.

Externally, the laptop has a sleek, silver-grey case, with a durable, high-quality build and a pleasant matte finish. At 1.34kg and 18mm thick it's not too much trouble to lug around, but there are sleeker and lighter models if you're looking for something even more portable.

The configuration of ports around the laptop is impressive, particularly the two USB-C ports where most laptops still only come with one. One of them is needed to connect to the supplied power cable, though there is another port for an optional power adapter (for an extra £18) if you want to free up both USB-C ports. There are also two full-size USB 3.1 ports, an HDMI port and a 3.5mm audio jack.

We found the EliteBook's keyboard very comfortable to type on: the keys have a short travel distance, which made working very efficient and satisfyingly quiet. It also has a fuss-free backlight that can be adjusted between three levels of brightness. The trackpad is smooth to operate and largely faultless, featuring left- and right-click buttons at the top, while also accepting clicking on the surface of the trackpad, as long as you don't stray too close to its edges.

The 720p resolution built-in webcam uses a wide angle, which is useful if you tend to have video chats with more than one person at the computer. Although it doesn't come with a privacy slide cover, the webcam merges perfectly with the sleek design of the laptop.

The zigzag-patterned speakers on either side of the keyboard enhance its otherwise minimalistic design. They aren't powerful enough to fill a large room with music, but they're perfectly fine for video calls and streaming TV to your lap.

SPECIFICATIONS

Eight-core Intel i7-10510U processor • 16GB memory • 512GB SSD • 2x USB-C ports • 2x USB-A 3.1 ports • HDMI port • 802.11ax Wi-Fi • Windows 10 Pro • 17.9x323x215mm (HxWxD) • One-year warranty
www.snipca.com/37041

VERDICT A sturdy laptop with a great build quality, but its Intel processor lags behind the AMD version we reviewed last issue

★★★★★

ALTERNATIVE HP EliteBook 845 G7 with 16GB RAM £1,126 A similarly priced alternative with a performance-boosting AMD processor

PC | **£1,000** from Chillblast www.snipca.com/37042

Chillblast Fusion Marine 1660 Super

Chilled to perfection

Chillblast

PCs designed to run games often look good, but the Chillblast Fusion Marine oozes more class than most. Its tempered glass case looks amazing and is tastefully illuminated when you switch the PC on. It's also remarkably quiet, with a low whirr from the fan that's stable enough to fade into the background.

> Fast with generous storage, memory and upgrade options

The supplied Intel Core i5-10600K processor probably doesn't need the water-cooling system that Chillblast has fitted alongside it, unless you're feeling adventurous and are thinking of overclocking it. If you are, the cooling is ready and waiting for you. Fortunately, such extravagances haven't resulted in corner cutting elsewhere. The opposite is true when it comes to memory, with its 32GB of RAM offering more than enough to run plenty of Windows programs at the same time.

For storage, the PC comes with a generous 500GB Samsung 970 EVO SSD, which provides lots of room for installing the software you want running at top speed. It's one of the fastest SSDs we've tested, so it's another luxurious addition. It's backed up by a 2TB Seagate hard drive, so there's plenty of space for the rest of your files.

GEFORCE GTX
ASUS
fractal
Chillblast

There's also a generous amount of physical room inside the case, so you can upgrade the PC at a later date, with spare memory slots and space to put more SSDs and mechanical hard drives. With the cooling system and a 600W power supply, you can add components to upgrade, such as a more powerful graphics card, without needing to worry about whether the system will cope.

The PC's graphics are powered by the GeForce GTX 1660 Super graphics card. In our gaming benchmark tests we measured 102fps at 1440p (High settings) in the Formula One racing game F1 2020, but in more demanding games it dropped down to between 61fps and 44fps. If you're happy to reduce the resolution to 1080p, those frame-rate figures jump to a respectable 149fps, 91fps and 59fps respectively.

The great thing, of course, about buying from Chillblast, rather than from the larger high-street brands, is that if there's an element of the PC that you'd like to change, you can usually tweak your specifications *before* you buy.

SPECIFICATIONS

Intel Core i5-10600K processor • 32GB memory • Nvidia GeForce GTX 1660 graphics • 500GB SSD • 2TB hard drive • 802.ax Wi-Fi • 1x USB-C port • 4x USB-3 ports • 2x USB-2 ports • Windows 10 Home • 425x397x210mm (HxWxD) • Five-year warranty www.snipca.com/37042

HOW WE TEST

Computeractive is owned by Dennis Publishing, which employs a team of specialist technical reviewers. You'll often read references to our benchmark testing, which is a method of assessing products using the same criteria. For example, we test the speed of every PC and the battery life of every phone and tablet in exactly the same way. This makes our reviews authoritative, rigorous and accurate.

Dennis Publishing also owns the magazine *PC Pro* and the websites Expert Reviews (www.expertreviews.co.uk) and IT Pro (www.itpro.com). This means we can test thousands of products before choosing the most relevant for *Computeractive*.

FAIR AND IMPARTIAL

Our writers follow strict guidelines to ensure the reviews are fair and impartial. The manufacturer has no involvement in our tests.

OUR AWARDS

We award every product that gets five stars our Buy It! stamp of approval. It means we were extremely impressed by the product, and we think you will be too.

Every product that gets a four-star review is given the Recommended award. We highly recommend these products, although they just fail to meet the high standard of our Buy It! winners.

PRICES

Our reviews contain a link to the best price we found online at the time of press.

VERDICT With a top-quality build, this great all-round PC will appeal to gamers and general PC users alike

★★★★★

ALTERNATIVE Palicomp Intel Mercury £600 Comes with a larger 1TB SSD drive but less memory, and is configured for general Windows use rather than gaming

LAPTOP | **£500** from Box www.snipca.com/37046

Avita Liber V 14in

Off colour

A £500 laptop is inevitably going to suffer from some compromises, but you won't spot the Liber V's until you switch it on. From the outside it looks great, with its jet-black finish (also available in red and grey) breaking ranks with the current trend of simply copying the look of the latest Apple MacBook.

The unit weighs 1.3kg, with a case that's mostly made from metal, except for the base, which is plastic. However, there's still some flex in the screen lid, which makes it feel a little fragile. One minor oddity is that the webcam isn't flush with the screen, but extends out slightly from the top (as you can see pictured right). Unfortunately, it's quality is disappointing also, with fuzzy focus and poor colour accuracy, which isn't going to impress anyone you chat with on video.

> “Attractive budget laptop makes too many compromises”

The screen is a 14in IPS model with a resolution of 1920x1080 pixels, but our tests results were disappointing – covering only 57 per cent of the sRGB colour range, which is low for a laptop screen. We also recorded an average Delta E of 5.15, which is far too high – ideally this should be below 1. It's bright enough, hitting a peak of 290cd/m^2, but even a solid contrast of 1,076:1 isn't enough to make up for its colour problems.

This means it's not ideal for editing photos or watching films, but if you're just looking for a device for web browsing or working on documents, it's less of a problem. The keyboard is surprisingly good for a budget model, with plenty of travel on each key, no hint of sponginess, and it doesn't produce too much noise.

What's more, the huge touchpad makes it straightforward to use Windows' gesture controls. It doesn't have the glassy finish of the top-drawer trackpads, but you won't miss this unless your current trackpad offers a silkier feel. Despite its size, it managed to ignore our palm when we rested on it while typing at the keyboard, and you can easily switch it off if you have a mouse connected.

The chassis has a fairly comprehensive collection of ports, including a single USB-C port, two standard USB 3.0 ports, an HDMI output for connecting to another screen, a microSD card slot, and a 3.5mm headphone jack. It's one step behind the very latest network connections, with 802.11ac Wi-Fi and Bluetooth 4.1, but it does have a fingerprint reader you can use for logging into Windows.

The AMD Ryzen 3500U processor isn't state of the art, but we weren't expecting it in a laptop at this price. Performance is good in bursts, so it performed well in the Geekbench 5 benchmark test, which is a relatively short test, scoring 887 in the single-core test and 3,019 in the multi-core test. However, running the test again straight after saw a drop in the result (multi-core down to 2,687) as the processor slowed itself down to stop overheating. For comparison, the Honor MagicBook 14 (see Alternative, below) scored 878 and 3,046 in the same test but its performance didn't suffer under more intense pressure. Performance isn't helped by the laptop's SATA SSD, which is slower than the NVMe SSDs found in rivals.

You can play undemanding games on the device, thanks to AMD's integrated Radeon Vega 8 graphics, but we found we needed to drop down to 720p resolution to get a decent frame rate out of it. The battery life was also disappointing, lasting just 4 hours 57 minutes in our test.

SPECIFICATIONS

Quad-core 2.1GHz AMD Ryzen 5 3500U processor • 8GB memory • 256GB SATA SSD • 1x USB-C port • 2x USB-A 3 ports • HDMI port • 802.11ac Wi-Fi • Windows 10 Home • 17.4x318x218mm (HxWxD) • One-year warranty www.snipca.com/37046

VERDICT A stylish, well-built laptop for an attractive price, but it fails to live up to its good looks

★★★★★

ALTERNATIVE Honor MagicBook 14 £549 A little bit more expensive but significantly better performance

PRINTER | **£205** from ILGS www.snipca.com/37058

Epson WorkForce Pro WF-C5210DW

Join the inkjet set

Computer active RECOMMENDED ★★★★

Churning out a lot of prints on an inkjet printer can be an expensive business, with miniscule cartridges regularly running dry and costing a small fortune to replace. This printer has been designed to combat this problem, with healthy XL cartridges capable of printing 5,000 pages. This works out to 1.3p per mono page and 5.7p for colour, which is good value for an inkjet printer.

Even the supplied cartridges have an impressive capacity. Rather than fobbing you off with half-empty starter supplies, Epson throws in a set of standard 3,000-page cartridges, which should last you a fair while.

> “Reasonable running costs and perfectly sharp prints”

There's a good set of paper options, with a built-in 250-sheet paper cassette and an 80-page tray at the rear for thicker material (up to 256gsm). Ethernet, 802.11n Wi-Fi and USB connections are all supported, along with AirPrint and Wi-Fi Direct, plus an NFC sensor for supported mobile devices.

Epson's simple setup tool detected the printer on our network right away, and automatically went off and downloaded the latest drivers and printer firmware. Next, a desktop status monitor is installed, which lets you keep an eye on ink levels and maintenance status. You can also check these from the printer's web console and register it with Epson's Connect remote-print service. This gives your printer a dedicated, customisable email address, so remote users can print documents by sending them as attachments.

Print performance is impressive, producing standard text pages at around 24 pages per minute (ppm). We had to wait seven seconds for our 24-page Word document to *start* printing, but it was then delivered in one minute at standard quality. The high-quality print mode is far slower, turning out the same document at barely over 6ppm, but you won't normally need to use this, as standard mode is perfectly sharp enough for general use, with only a hint of blurring around smaller fonts.

Printing in colour slows things down: our 24-page mixed document came out at 20.6ppm in standard mode and 5.8ppm in high quality. It's worth the wait, though, as colour quality is excellent. Our graphics and photos looked sharp and detailed without a hint of banding – even in large single-colour areas.

Mobile users can use Epson's iPrint app, which connects to the printer automatically as long as you're on the same Wi-Fi network. As well as printing directly from your device, you can search and print from Box, Dropbox, Evernote, Google Drive and Microsoft OneDrive.

SPECIFICATIONS

4,800x1,200dpi maximum print resolution • 24ppm print speed • 802.11n Wi-Fi • Gigabit Ethernet • USB 2.0 • NFC • 357x425x535mm (HxWxD) • 15.3kg • 1-year warranty www.snipca.com/37058

VERDICT A great printer for a home office, with high-quality prints that aren't too expensive to produce

★★★★☆

ALTERNATIVE VHP Neverstop Laser 1202nw £260

This all-in-one laser printer adds scanning and copying but you can't print in colour

CHOOSE THE RIGHT SPECS

Refresh rate

What is it?

A monitor's refresh rate is how many times it can produce a completely new image every second. In a PC's graphics hardware, it's often referred to as the frame rate.

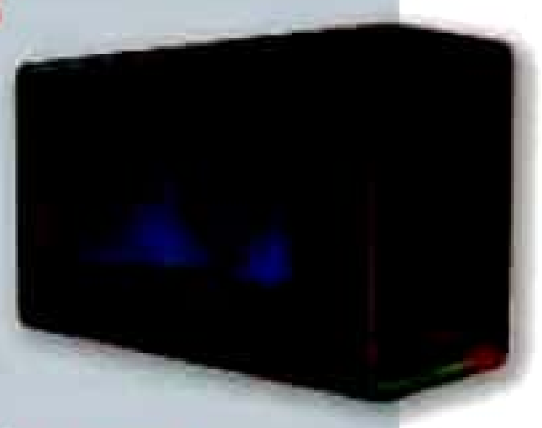
How does it work?

Like TVs, PC screens create an illusion of movement by flashing a stream of still images at us. Our brains put the images together, creating the illusion of movement. Your PC's graphics card detects the refresh rate of your screen and supplies it with as many images per second that the slowest of the two can handle.

What are the specs?

The base standard of even the cheapest monitors nowadays is 60Hz – that's the ability to refresh the screen with a new image 60 times every second. Interestingly, as you go up in price, size and resolution scale, you won't necessarily see an increase in refresh rate, and there are plenty of 4K screens that still only refresh at 60Hz. Gamers, however, will notice their graphics hardware may be able to deliver faster frame rates, so it's worth matching a new monitor's refresh rate to your graphics card's top speed. The cheapest graphics cards match the basic monitor spec of 60Hz, but graphics hardware designed for gamers can ramp this up to 144Hz and beyond.

Can I change it later?



If you have a desktop PC you can swap your screen for one with a better refresh rate, and upgrade your graphics card. Make sure you're not upgrading one if the bottleneck is in the other. Laptops have fitted screens and built-in graphics hardware, so tend to be less upgradable, though you can buy external graphics hardware and connect to an external monitor. The Razer Core X Chroma (pictured), for example, is a case that lets you add a full sized graphics card to a laptop, though it costs costs £375 (www.snipca.com/37063).

HEADPHONES | **£100** from Amazon www.snipca.com/37065

Lindy BNX-100XT

Silence is golden

Computer active
RECOMMENDED
★★★★

Lindy's original BNX-100 was a brilliant pair of budget over-ear, noise-cancelling wireless headphones, but sadly they've been discontinued. The BNX-100XT is the direct replacement and is another great place to start if you're looking for budget headphones that reduce unwanted sounds from the outside world.

> "Produces crisp audio and effectively blocks outside noise"

For this very reasonable price of £100 you get a pair of wireless headphones (which operate over Bluetooth 5), a durable hard-shell carrying case, a 3.5mm audio jack cable, a USB-C charging cable, an aeroplane plug adapter and a 6.3mm stereo-plug adapter.

The headphone unit itself is brimming with clever technology, including auto-pause/resume when you take the headphones off and put them back on, an audio passthrough mode which drops your volume to let you better hear your surroundings, and an integrated microphone for making phone calls.

The battery lasts up to 15 hours with both Bluetooth and noise-cancelling switched on (up from 12 hours in its predecessor). This is a welcome extension but it falls short of similarly priced competitors. For example, the Philips PH805 (www.snipca.com/37082), which cost around £116, works for up to 25 hours.

You can connect the BNX-100XT to two devices simultaneously, which is handy if you're regularly switching between a laptop and a phone or tablet. There are volume up and down buttons on either side of a power button on the right earcup, while noise-cancelling and the passthrough buttons are located on the left cup.

The noise-cancelling works well and we found it reasonably effective at reducing the low-end rumble of public transport and passing traffic. It's not so good at cutting out higher-frequency sound, but overall you're getting decent noise-reduction capabilities for this kind of money.

We also found the sound quality good, delivering crisp audio. This is tempered a little when the noise-cancellation is switched on, which we found removed some of the depth from more bass-heavy tracks. This is worth keeping in mind if you think you're likely to activate noise-cancelling most of the time.

SPECIFICATIONS

Over-ear headphones • 40mm speakers • Active noise-cancellation • External audio passthrough • Bluetooth 5 • 3.5mm audio input • Microphone • USB-C charging • Two-year warranty www.snipca.com/37065

VERDICT A solid set of basic noise-cancelling headphones, though not recommended if you listen to bass-heavy music all the time

★★★★☆

ALTERNATIVE

OneOdio A10

£49 Surprisingly good noise-cancelling headphones for half the price

WHAT SHOULD I BUY? We solve your buying dilemmas

What's the best £500 laptop for video chats?

Q **With the third lockdown underway, I need to buy a new laptop that's capable of smooth video chats. My budget is just £500.**

Mary Fallon

A To provide a good video picture to others, you need to make sure your new laptop has at least an HD camera. This certainly isn't a given on many £500 laptops, with some models only offering a VGA (640x480-pixel) webcam. You also want the laptop to be able to multitask and stream video, so plenty of memory is more useful to you than a top-end processor.

Of what's currently available on the Curry's PC World website, for example, we like the Dell Inspiron 15 3000 15.6in laptop (www.snipca.com/37070, pictured), which has a decent AMD Ryzen 5 processor, 8GB of memory and a 256GB SSD, along with an HD resolution webcam and a 15in screen, which won't leave you squinting to see the people you're chatting to.

Don't forget that video-call quality is also dependent on your internet connection. Sit close to your router if you can, and dissuade other people from using Wi-Fi at the same time.

Do you need advice on what you should buy? Email us at letters@computeractive.co.uk

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Free Sync | FLICKER FREE LED | 🔊 | 🎧

Find your match at gmaster.iiyama.com

USB DOCK | **£132** from Ballicom www.snipca.com/37097

HP USB-C Dock G5

In every port

Most modern laptops come with a limited number of ports on their super-slim cases, but with the right hub a single USB-C port can provide all the monitor, network and extra USB ports you'll ever need. This USB-C dock is designed to sit on your desk and provide even the most lightweight of laptops with a decent choice of extra connection options.

It's a powered port, so comes with its own plug for attaching to a wall socket. Although you might roll your eyes at the thought of having to find another power socket behind your desk, laptops that require less than 75W can use this instead of their own USB-C power supply. This is because it's more than powerful enough to run your PC and keep the battery charged.

The rear of the device offers a range of ports to connect a monitor to, including two DisplayPorts and an HDMI output. It can only use two of these at one time, but if you include your laptop screen, this is more than enough for a three-screen setup.

There are four standard USB ports, with two on the back and two on the side. While two of these are the fast USB 3.2 standard, the other two are USB 3.0, which is slower. They're still good performers, but in our tests the 3GB file we transferred took five seconds with the fast ports but 10.7 seconds through the slower ports. If you're looking for a decent wired connection, there's also a Gigabit Ethernet port.

SPECIFICATIONS

1x USB-C port • 4x USB-3 ports • 2x DisplayPort • 1x HDMI port • Gigabit Ethernet port • 3.5mm headphone jack • 45x122x122mm (HxWxD) • 680g • One-year warranty www.snipca.com/37097

VERDICT A hefty USB-C hub that sits on your desk and provides a wider variety of ports than most modern laptops can dream of

★★★★★

ALTERNATIVE HP Elite USB-C Hub £76 A hub that's small and compact enough to carry around with you, though it doesn't have as many ports

TRACKBALL MOUSE | **£45** from Amazon www.snipca.com/37094

Logitech Ergo M575 Wireless Trackball

On the ball

This wireless trackball is the most affordable of Logitech's ergonomic pointing devices. It sits on your desk and you wrap your right hand around it. Then, instead of moving the whole device around as you would with a traditional mouse, you roll the ball under your thumb in the direction you want the cursor to travel.

With this new design it doesn't matter how large your hand is: your fingers will always rest naturally over the left and right mouse buttons, with your thumb over the trackball. We found it comfortable to use, even for long periods of time.

If you're switching from a regular mouse, the biggest change is to using just your thumb to move the cursor around the screen instead of your whole hand. This is a particular challenge when scrolling sharply downwards – you sacrifice a lot of accuracy while you get used to it. With practice, however, it gets much easier to use, and we soon found ourselves rotating away without thinking about what we were doing.

There are two programmable shortcut buttons and the scroll wheel is clickable, but that's it in terms of features. Connectivity is also simple, with a choice of Bluetooth or the supplied wireless USB dongle. The device is powered by a single AA battery, which Logitech claims should last for around 18 months.

It's nice and easy to clean, too, as you can remove the ball from its socket to give it a good wipe.

SPECIFICATIONS

Tracking up to 2,000dpi • 5 buttons • Bluetooth LE • 2.4GHz wireless USB connection • Works with Windows 7, 8, 10 and macOS 10.14 or later • 48x134x100mm (HxWxD) • 145g • Two-year warranty www.snipca.com/37094

VERDICT A simple, comfortable and affordable alternative to a mouse, ideal for those who suffer from discomfort while using their PC

★★★★★

ALTERNATIVE Logitech Vertical Advanced Ergonomic Mouse £93 A more traditional mouse with an ergonomic holding position, but it's twice the price

SMART SPEAKER | **£349** from Amazon www.snipca.com/37100

Braun LE03

Blast from the past

Computer active RECOMMENDED ★★★★

Although it's been quiet of late, Braun will be a familiar brand name to anyone over the age of 40. Most readers will probably remember the time when bathrooms and kitchens were crammed with devices made by the German company. The firm also produced some innovative audio products in the late 1950s and 60s, and it's this era that the new Braun LE03 smart speaker harks back to. However, this time the hardware has been designed and produced under licence by British digital radio manufacturer Pure.

> "Punchy, room-filling audio from within a classy retro design"

The LE03 is the smallest of three models in the new LE range, but at £349 it's far from cheap. It has most of the features you'd expect from a smart speaker. When connected to Wi-Fi it's compatible with Google Assistant, Chromecast and Apple AirPlay 2. You can also connect devices via Bluetooth 4.2 or its 3.5mm audio jack. Audio output is mono, although it's possible to pair two LE03s together to create a stereo system.

The minimalist design borrows heavily from Braun's 1959 LE1 speaker (see its Wikipedia page for a photo: www.snipca.com/37107). While it may not scream personality, the classic black and white exterior of our review model (it's also available in all black) lends itself well to any environment.

Google Assistant works faultlessly, with the speaker's two microphones picking up voices accurately and consistently, even with music playing at higher volumes. There's a privacy button for de-activating the microphones if you'd prefer to stop Google Assistant listening in. There are also play, pause and Bluetooth-pairing buttons, an 'action' button that engages the microphone without using the "Hey Google" or "OK Google" wake words, and discreet volume up and down buttons.

Pure's reputation for creating great-sounding radios has transferred well to the LE03. The speaker sounds good, with ample mid and upper range, and no shortage of punch to low-end frequencies. It filled our reasonably sized test room at around half volume and, as you near the upper end of its volume range, things move into house-filling, neighbour-enraging territory. You can adapt the sound depending on where the speaker is placed but, unlike the Sonos app, which does this automatically, Braun's alternative forces you to choose the sound profile from a list of options.

SPECIFICATIONS

802.11ac Wi-Fi • Bluetooth • 89mm woofer • 38mm tweeter • 3.5mm audio-in socket • Mains adapter • 170x170x84mm (HxWxD) • 1.65kg • Two-year warranty www.snipca.com/37106

VERDICT Solid audio and effective Google Assistant integration in an attractive, great-sounding minimalist speaker

★★★★☆

ALTERNATIVE

Sonos Move £399

An even better speaker that's portable and safe to use outdoors, though it costs £50 more

DO I REALLY NEED...

A bendable PC screen?

What is it?

In early January LG announced a bendable 48in OLED screen that can be flat or curved.

What does it do?

Curved screens (like the one pictured here) were all the rage a few years ago. They're great for gaming, where you can sit in the middle of the screen and immerse yourself in the action. They're not so great for watching films with others, though, because anyone not sitting in the sweet spot gets their view skewed. Bendable screens should offer the best of both worlds, letting you switch from flat to curved at the press of a button.

What's the catch?

It'll probably be very expensive. Given that LG's standard OLED 48in screen is £1,500 at Currys, we'd guess this will set you back least £2,000.

So can I do without it?

Yes, unless you're particularly obsessed with both films and gaming, and are willing to pay for the best of both worlds.

NEXT ISSUE

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A top-quality desktop PC with Nvidia RTX graphics

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Our pick of products that have won the Buy It award

LAPTOP

Honor MagicBook 14
£600 from www.snipca.com/34688
Tested Issue 580

Using an AMD Ryzen 3500U processor, this lightweight metal laptop beat Microsoft's Surface Laptop 3 with Intel's i7-1065G7 in our tests. The 14in Full HD screen lacks colour accuracy but looks decent. For the money, it's a great buy.

ALTERNATIVE Dell XPS 13 New Intel CPUs and a taller screen make this a more powerful, all-round slim notebook, although prices now start at a steep £1,629 from www.snipca.com/36642

DESKTOP PC

Palicomp
Intel Mercury
£600 from www.snipca.com/34223
Tested Issue 576

If you don't need advanced gaming, your money's well spent here on a six-core Intel i5-9600K processor overclocked to 5GHz. 16GB of memory and a full terabyte of fast SSD storage round off a powerful PC with good expansion potential.

ALTERNATIVE Chillblast Photo Zen Fast Ryzen 7 CPU plus adequate GPU makes a superb work PC. £1,580 from www.snipca.com/35840

APPLE iPAD

Apple iPad 10.2in
£329 from www.snipca.com/36178
Tested Issue 566

The basic iPad is great value, especially now it's been updated with a powerful A12 processor and iPadOS 14. It includes Scribble handwriting recognition with the £89 Apple Pencil. Storage isn't expandable; consider 128GB at £429.

ALTERNATIVE iPad Mini With an even better, but smaller, screen than the 10.2in iPad, the Mini also supports the Pencil and has 64GB of storage. £399 from www.snipca.com/33050

ANDROID TABLET

Samsung Galaxy Tab S6 Lite
£349 from www.snipca.com/35795
Tested Issue 582

Competing with Apple's cheapest 10.2in iPad, this slim aluminium tablet comes with an S Pen stylus and a generous 64GB of storage at a reasonable price. It's less powerful, but a great buy if you prefer Android.

ALTERNATIVE Amazon Fire HD 8 Now with USB-C and 32GB of storage, this plastic-cased tablet is more limited, with no stylus option, but good for the money. £90 from www.snipca.com/35336

APPLE iPHONE

Apple iPhone 12
£799 from www.snipca.com/36582
Tested Issue 595

The latest iPhone has a modest increase in already exceptional processing power plus even better photos and videos from the front and twin rear cameras. It comes in a redesigned case with aluminium frame and even tougher glass. Consider paying the £50 extra for 128GB of storage.

ALTERNATIVE iPhone SE With a single camera and smaller screen but the same powerful A13 processor and 64GB storage as the iPhone 11, it's great value. £399 from www.snipca.com/34773

ANDROID PHONE

Realme X50 5G
£269 from www.snipca.com/36037
Tested Issue 590

Amazing value for a big 5G phone with three rear cameras (including ultra-wide and macro), a pretty quick Snapdragon 765G processor and a decent IPS screen. There's a fingerprint reader, but no wireless charging or waterproofing.

ALTERNATIVE Google Pixel 5 Cheaper than previous Pixels, this has great cameras, wireless charging and a superb screen. Battery life is 23 hours. £599 from www.snipca.com/36586

Computer active

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GET IT EARLY

BEAT LOCKDOWN

Hello,
I'd like to thank you for continuing to read *Computeractive* during the past year. It's been a tough time for everyone, but I'm glad we could provide a semblance of normality.

As I write this, we're in the third week of another lockdown. Many of the shops that stock *Computeractive* have closed. Since these restrictions were announced, we've seen a sharp rise in readers subscribing to the magazine in order to guarantee that it drops on their doormat every fortnight. To handle this rise in subscriptions, we're putting additional effort into our deliveries to make sure you get your copy on time (several days before it goes on sale in the shops).

If you're thinking of subscribing, please see details below. And if you have any questions about subscribing, please don't hesitate to email me: **editor@computeractive.co.uk.**

Kind regards,
Daniel Booth

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Our pick of products that have won the Buy It award

EBOOK READER

Amazon Kindle (2019)

£70 from www.snipca.com/31621
Tested Issue 555

Chapter One

Now with built-in light and audiobook support, this budget model is fine for most users, though limited by its 4GB of storage. The Paperwhite (£120) is even sharper, waterproof, and has bigger storage options as well as a cellular data option (£100 extra).

ALTERNATIVE Kobo Clara HD Not waterproof, but has more lighting options to avoid blue light. £110 from www.snipca.com/32586

SECURITY SOFTWARE

Kaspersky Internet Security 2021

£14.99 from www.snipca.com/21532
Tested Issue 564

Kaspersky Internet Security
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Safe Money
Privacy Protection
Parental Control
Protection for all devices

Kaspersky Internet Security has won our past nine antivirus tests and the 2020 version is now available at an exclusive reader discount on our Software Store. Go to the link above for a one-year, one-device licence or buy a two-year, two-device licence for just £26.99.

ALTERNATIVE Norton 360 Deluxe Almost as good as Kaspersky, but blocks more legitimate software. £15 from www.snipca.com/32069

PHOTO EDITING

Serif Affinity Photo

£49 from www.snipca.com/23739
Tested Issue 498

Designed for both full-time professional image retouchers and the rest of us keen amateurs, this is a beautifully designed and comprehensive program for both Windows and Mac users, although so far it performs better on Macs.

ALTERNATIVE Xara Photo & Graphic Designer For all-round design and drawing plus photo filters, this affordable app has a lot to offer. £42 from www.snipca.com/26514

PC MONITOR

BenQ GL2780

£161 from www.snipca.com/34834
Tested Issue 581

This budget 27in screen offers accurate sRGB colour with good contrast, plus auto brightness and low blue light modes. Speakers are built in. Using TN LCD rather than IPS, it needs to be viewed straight on, but works well for games too.

ALTERNATIVE Philips Brilliance 241B7QPJEB With a great picture, stylish design and speakers, this 24in Full HD IPS is an excellent smaller screen. £199 from www.snipca.com/37096

ROUTER

D-Link DIR-1960

£100 from www.snipca.com/32849
Tested Issue 564

D-Link
D-Link

Giving us download and upload speeds of 460Mbps and 375Mbps respectively, this is phenomenal value. Even two floors away we got 329Mbps and 284Mbps. It has four Ethernet ports for wired devices and a USB 3.0 socket to share storage via your network.

ALTERNATIVE Synology RT2600ac Comprehensive sharing features, controls and plenty of add-on apps complement excellent long-range performance. £222 from www.snipca.com/30710

PRINTER

Epson Expression Premium XP-6105

£119 from www.snipca.com/36630
Tested Issue 554

With many leading all-purpose printers having sold out during lockdown, this white version of the XP-6100 wireless six-ink printer/scanner/copier is a good choice for photos first and text second. It's easy to use and speeds aren't bad, but ink costs can work out high.

ALTERNATIVE Epson EcoTank ET-2711 This inkjet printer/scanner/copier isn't cheap but will save you a lot on ink (1p for two colour pages). Photo quality isn't the best, but scans are good. £180 from www.snipca.com/36183

COMPETITION

Win 1 of 2
D-Link DIR-X1860 routers

Winner of a four-star Recommended award in Issue 597 (page 25), D-Link's DIR-X1860 is an outstanding router that comes with Wi-Fi 6, enabling it to deliver maximum speeds of around 1.8Gbps throughout your home.

The combined dual-band technology guarantees an optimal Wi-Fi experience to all devices, with minimal delay, whether you're streaming videos, playing online games or simply browsing the web.

D-Link

Also, it's 'backwards compatible' with older Wi-Fi networks, meaning you won't lose access to devices that don't have Wi-Fi 6 built in.

You control the router from its online portal. This offers a simple firewall, which you can use to impose blocks and filters for all connected devices, and tools for routing traffic through a compatible VPN. You can assign priorities to different devices by dragging and dropping, and use Alexa or Google Assistant to control the guest network and reboot the router.

To enter this competition, email your address to **cacomp@dennis.co.uk** with 'D-Link' in the subject line by midnight Tuesday 9 February. Good luck!

You can buy **D-Link's DIR-X1860** routers from Amazon (www.snipca.com/36927), priced £103. For more information on D-Link's products, including security cameras, 4G routers and smart-home products, visit https://eu.dlink.com and follow @DLink_UK on Twitter.

MESH ROUTER

BT Whole Home Wi-Fi

£200 from www.snipca.com/26990
Tested Issue 496

BT's set of three discs, managed from an Apple or Android app, connects to your broadband and spreads high-speed Wi-Fi all around the house. Reception is far better than a single router, and the price is lower than any rival.

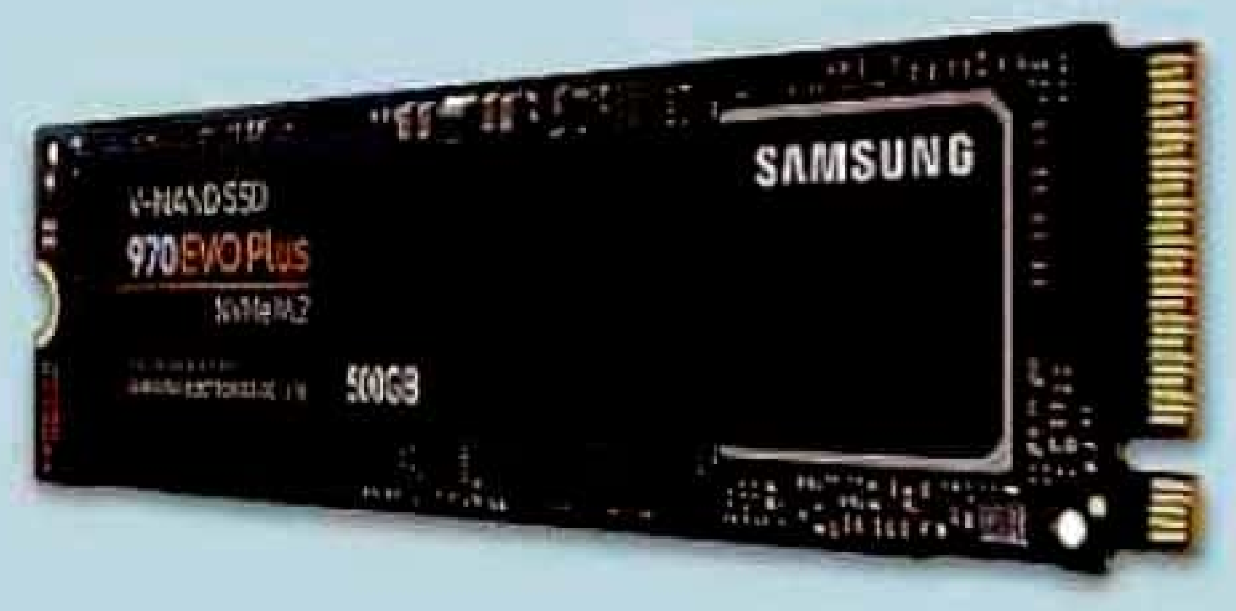
ALTERNATIVE Zyxel Multy X These two pillow-shaped boxes are powerful enough for most homes and provide four Ethernet ports apiece. £255 from www.snipca.com/27309

SOLID-STATE DRIVE

PRICE DROP

Samsung 970 Evo Plus 500GB

£82 from www.snipca.com/31265
Tested Issue 552



Although its price has fluctuated since we tested it at £99, this is a very fast (over 3GB per second) M.2 SSD unfazed by tests that make others slow to a crawl. Also consider the Adata XPG SX8200 Pro if you find it a bit cheaper.

ALTERNATIVE Crucial MX500 500GB As fast as an SSD can get in the traditional 2.5in SATA format, this is a great-value upgrade. £52 from www.snipca.com/30188

WEB DESIGN

Xara Web Designer Premium

£69 from www.snipca.com/34150
Tested Issue 453

Primary Daycare

This visual program makes creating sites more like laying out a document than writing HTML code, and sites can be responsive, meaning they look good on big and small screens. A cheaper, basic version is also available for £35.

ALTERNATIVE Incomedia WebSite X5 v13 Evolution It may feel basic, but this program outputs efficient HTML code and responsive pages. £39 from www.snipca.com/31179

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HOW TO...

Edit text and extract images from scanned documents

by Nik Rawlinson

What you need: Scanner or all-in-one printer **Time required:** One hour

There's a wide range of apps for scanning documents with your phone, many of which detect the edges of documents you point them at, then extract the text. If you need to capture text for research purposes in the library, they're a cheaper alternative than paying for photocopies. They're not for everyone, though, and if you have a scanner, or all-in-one printer with a built-in scanner on top, using that may be a better option.

A lidded scanner can more effectively control the light reaching the sensor, which has the potential to deliver a better result – and, because the scanning head is wider than the sensor in your phone, you can usually capture higher-resolution images, too. Moreover, many of the most useful features of some text-extracting apps are available only through an in-app purchase. Here, we'll show you how you can use a scanner to perform a lot of the functions that apps claim to offer for free.

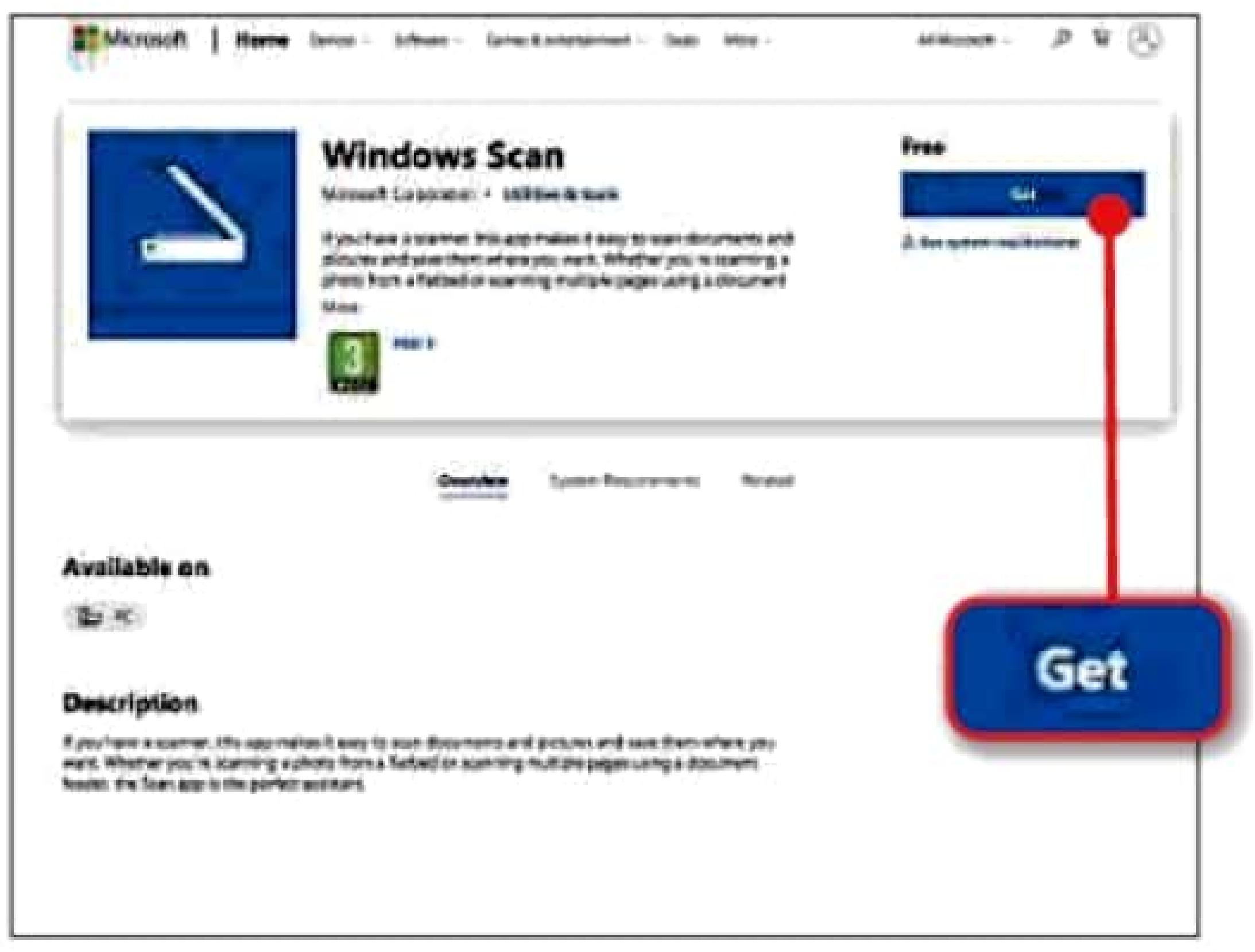
1 Install 'Windows Scan' from the Microsoft Store

Windows 10 has a built-in program called 'Windows Fax and Scan', which you'll find if you search in Windows for fax and scan.

As its name suggests, it does more than just scan documents: it's also designed to digitise the process of sending and receiving scanned documents by fax. But with fax machines becoming less and less common, you may only ever use a small proportion of its features. To our eyes, it's starting to look very dated.

Windows Scan, which is a free download from the Microsoft Store (www.snipca.com/37024, see screenshot right), brings things right up to date with a sleek, modern interface and a stripped-down set of features that let you focus on the task at hand.

Once you've installed it, it should automatically detect your scanner or all-in-one printer. If it doesn't, make sure your device is installed and fully up to date. Open the Windows menu and type scanner, then click 'Printers & scanners'. If your device doesn't appear in the list, make sure it's switched on and connected to your PC or your network, and then click 'Add a printer or scanner'.



Click 'Get' to install Windows Scan from the Microsoft Store

When you launch Windows Scan, you might think it's too basic, but by changing some of the settings you can uncover more advanced options. For example, when we launched it for the first time, the Source was set to 'Auto-configured'.

When we selected Flatbed from this menu, it revealed options for a broader range of output file types, including PDF (which was initially absent) and control over resolution and options for colour, black and white or greyscale scanning.

How I use OCR

I need to carry out a lot of background reading for research, and by scanning documents I can both keep a facsimile of any original I want to refer to, and create searchable versions by converting them using either an online service, as we have done here, or in OneNote if I'm storing it there. Right-click a page in OneNote and you'll see an option to 'Copy Text from Picture'.

Nik Rawlison

How do you use OCR ?
Please let us know: letters@computeractive.co.uk

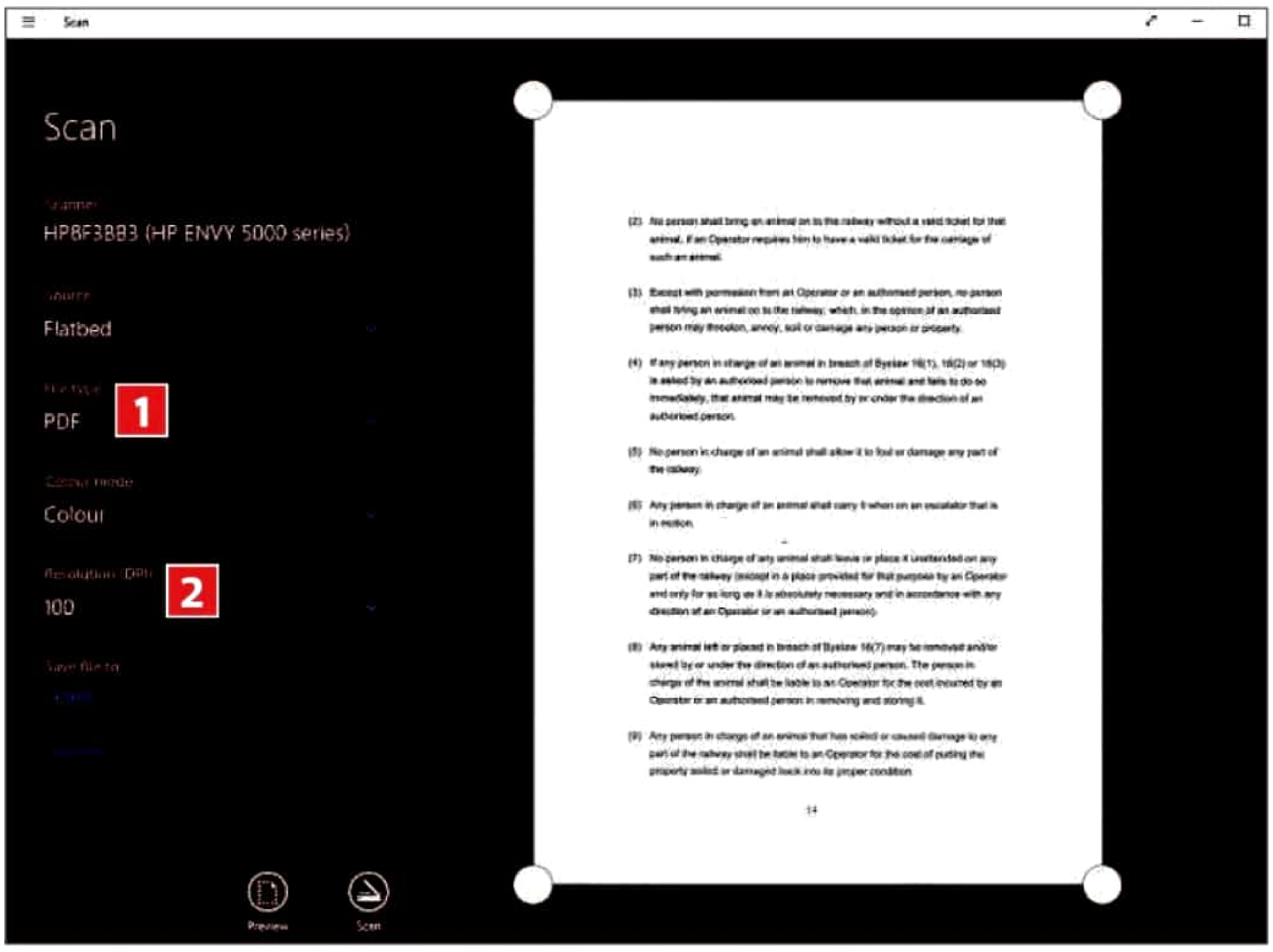
2 Capture text from your scan

While you could stick with the defaults, you should think carefully about what you're trying to achieve when carrying out a scan. It's worth keeping an eye on resolution, in particular. On our scanner, this defaulted to 300dpi (dots per inch), which can result in very high-resolution results, large file sizes and slower processing times, much of which could be wasted.

If you want to extract the text from a scan, resolutions as low as 75dpi should suffice. This will often be sufficient for being legible on screens too, so is a handy resolution for quickly capturing copies of bills and other documents you need to hang on to for reference.

Place your document in your scanner and click Preview. At this point, Windows Scan will do a preliminary, low-resolution scan of your document and detect its dimensions. You can change the scanned area by dragging the handles on the corners towards or away from the centre in the main image.

When you're happy with the area you've isolated, select PDF from the 'File type' menu (**1** in our screenshot below) and optionally reduce the resolution. We initially took ours down to 100dpi **2** as we knew we were going to put the result through another process – optical character recognition (OCR) – to extract the text, so we didn't need to produce a very high-resolution image to hold on to long term. However, we did find that that recognition results were better at 300dpi, and the online service we opted for (Online OCR – see below) suggested a minimum of 200dpi in its FAQ.



Scan

Scanner
HP8F3BB3 (HP ENVY 5000 series)

Source
Flatbed

File type
PDF

Colour mode
Colour

Resolution (DPI)
100

Save file to

We saved our scans as PDFs and reduced the resolution to 100dpi

Windows Scan will capture the document using your chosen settings and save the result in the Scans folder, inside the Pictures directory. Find the Scans folder by opening File Explorer and clicking Pictures in the sidebar.

3 Combine multiple pages in your scan

If you're scanning a multi-page document, it makes sense to combine the pages into a single document before converting them to editable text. That way you'll only need to perform the conversion once.

Various programs can do this for you, but most of them require a fee. If you're going to use them for this task alone, a free online alternative like CombinePDF (www.combinepdf.com) may be a better bet.

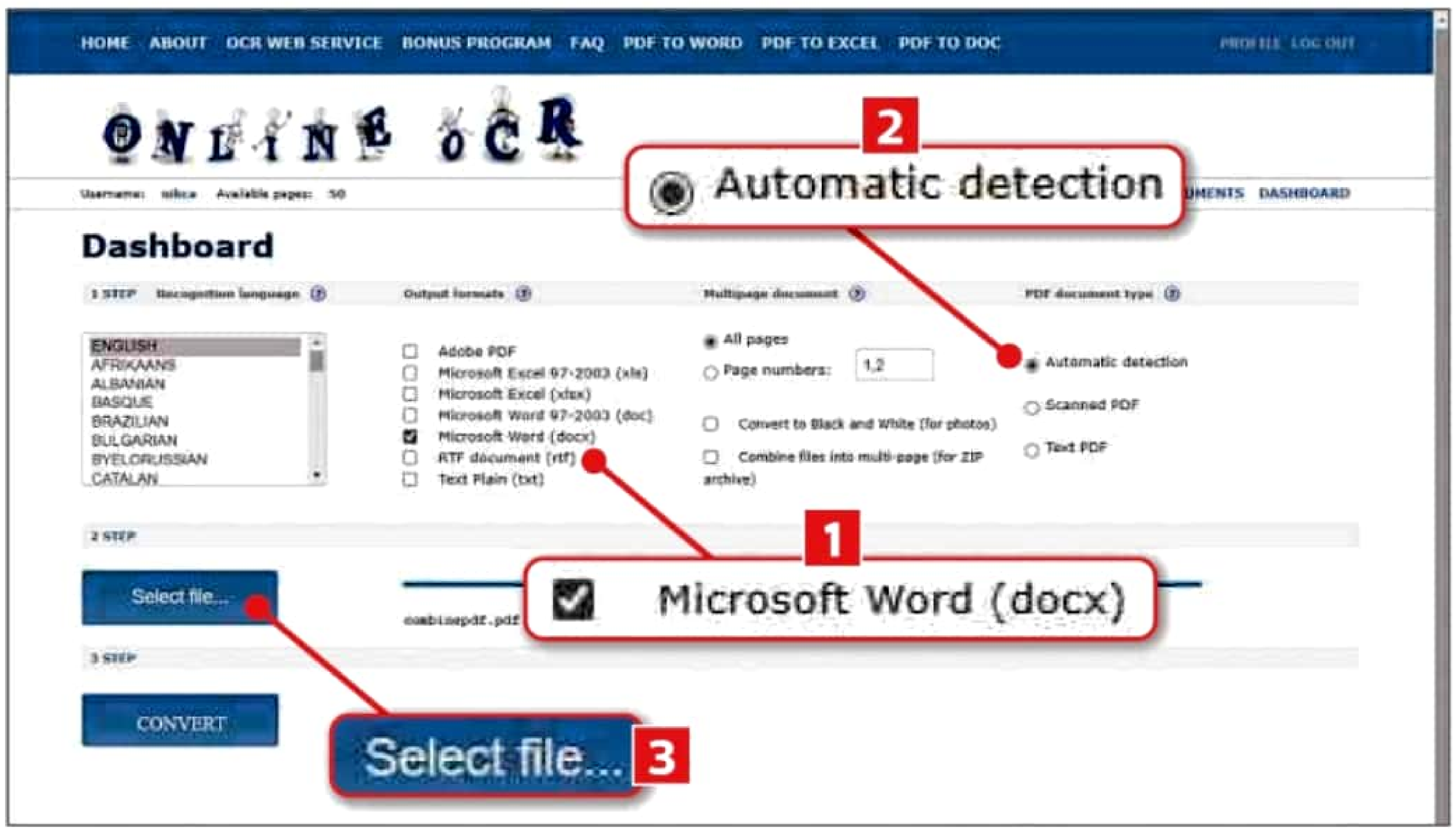
Click 'Upload Files', then navigate to the PDFs you created in the previous step. Select them, then click Open. CombinePDF uploads copies of your documents and shows thumbnail previews of each one on-screen. Click, hold and drag them if you need to rearrange them into a different order, then click Combine to convert the separate files to a single PDF, which will be saved to your Downloads folder.

CombinePDF lets you upload up to 20 PDF documents at a time for combining into a single file but, with a little lateral thinking, we found that it's possible to create PDFs of more than 20 pages. If you want to combine, say, 50 pages, upload the first 20 and combine them, then do the same with the next 20. You now have two 20-page documents, and 10 further loose pages. Now upload both of your 20-page PDFs, plus your 10 remaining pages and perform the combination operation one last time to produce a single PDF containing all 50 scanned pages.

4 Convert your document to text

Now that you have a single document containing all your scanned pages, it's time to convert it to editable text. Again, we'll do this using a free online service. We tested several options when writing this feature, and were surprised at the differences in accuracy between the best and worst – even when we were using a plain typeface like Arial in regular font sizes.

Our test document had numbered



Username: nilca Available pages: 50

Dashboard

1 STEP Recognition language

ENGLISH
AFRIKAANS
ALBANIAN
BASQUE
BRAZILIAN
BULGARIAN
BYELORUSSIAN
CATALAN

Output formats

☐ Adobe PDF
☐ Microsoft Excel 97-2003 (xls)
☐ Microsoft Excel (xlsx)
☐ Microsoft Word 97-2003 (doc)
☑ Microsoft Word (docx)
☐ RTF document (rtf)
☐ Text Plain (txt)

Multipage document

● All pages
○ Page numbers: 1,2

☐ Convert to Black and White (for photos)
☐ Combine files into multi-page (for ZIP archive)

PDF document type

● Automatic detection
○ Scanned PDF
○ Text PDF

2 STEP

Select file...

combinepdf.pdf

3 STEP

CONVERT

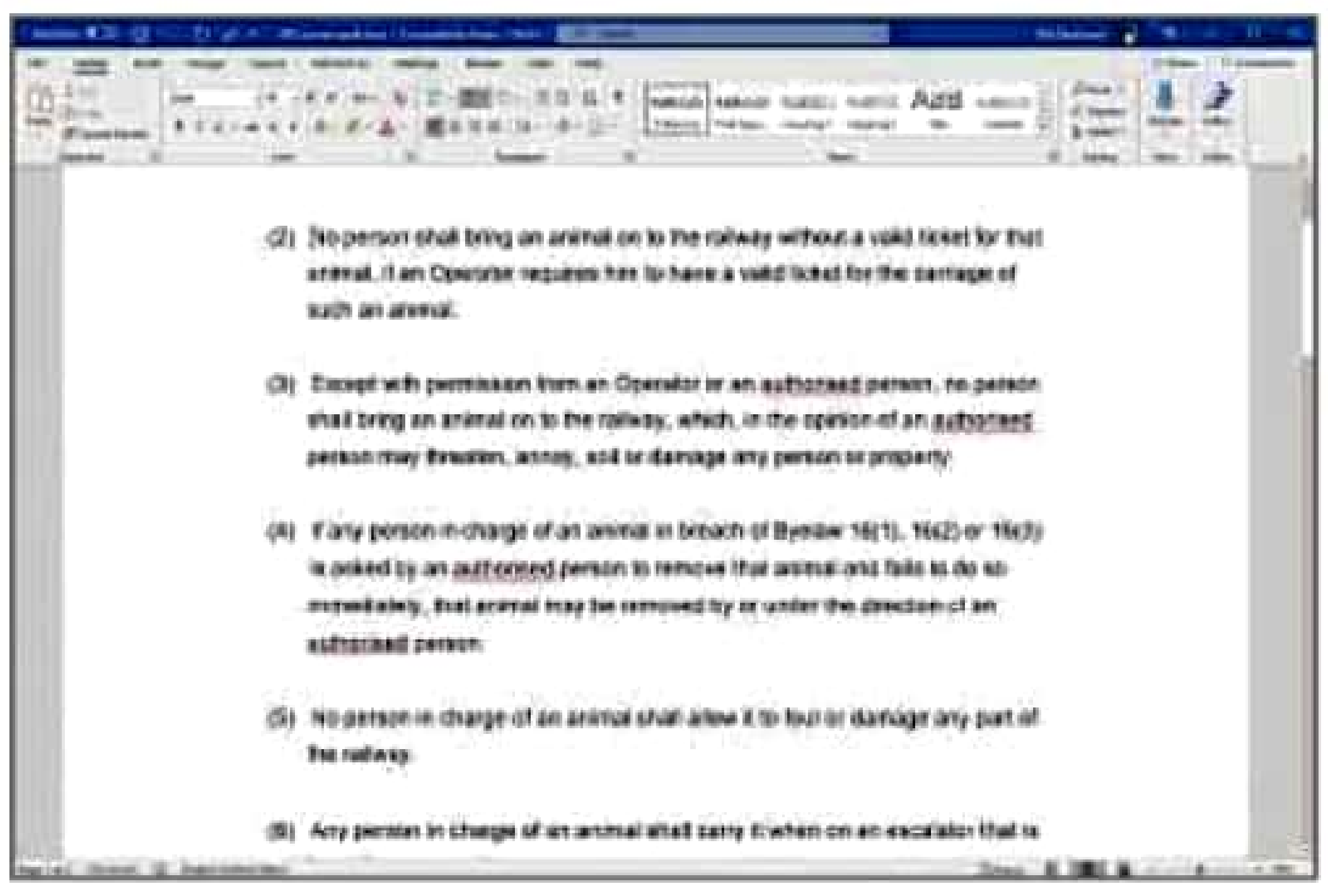
Select 'Microsoft Word' (1) to preserve formatting, followed by 'Automatic detection' (2) then 'Select file' (3)

bullet points, which some conversion tools interpreted not as prefixes to paragraphs, but as separate items. However, Online OCR (www.onlineocr.net) was more successful. If you want to try it before committing to the service, you can run a single page through it for free without signing up.

To process multi-page documents, you'll need to create a free account. This lets you convert 50 pages at no cost. After that, you can buy credits. These start at $4.95 for another 50 pages, but the per-page price gets lower as you buy increasingly large bundles. We'd recommend using your 50 free pages before buying additional credits so you can give it a thorough test with the kind of material you need it to recognise.

If you decide a service is right for you, make sure you read its terms and conditions and privacy policy when signing up because you'll be uploading documents to a server that isn't under your control.

To convert your first document, log in and work your way through the on-screen form, which is fairly straightforward.



Once you've extracted the text, you can edit the result in Microsoft Word (as shown here) or LibreOffice Writer

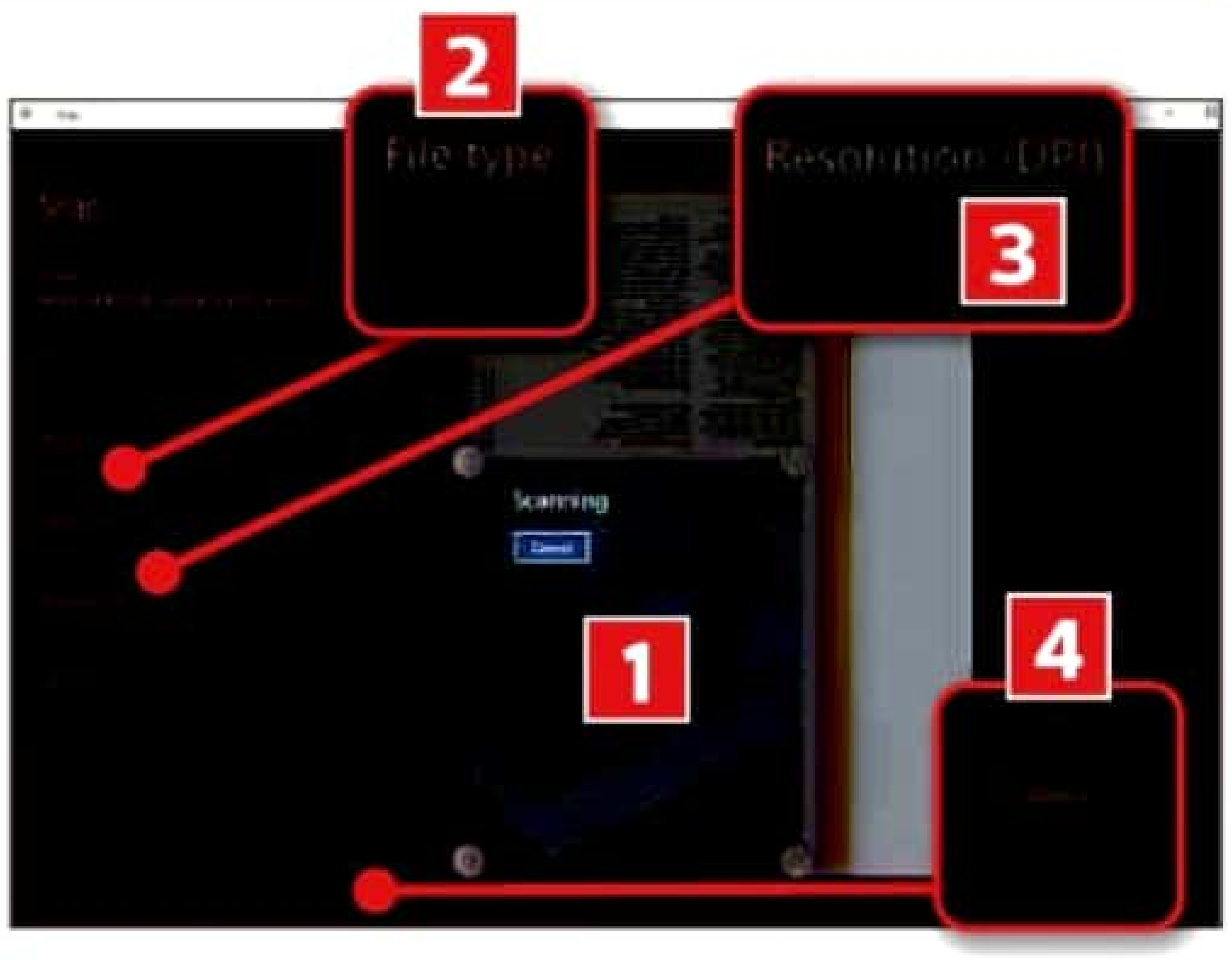
Select the language you're working with in the first column, and the format of the document you want to create in the second. We'd recommend selecting 'Microsoft Word (docx)' (**1** in our screenshot above) as the output format because it should preserve much of the formatting. Select either all pages, or a range of pages in the third column, and leave the 'PDF document type' set to 'Automatic detection' **2**, unless you have a good reason for selecting either Scanned PDF or Scanned TXT. Click 'Select file' **3** and navigate to the file you want to convert.

Once the file has been uploaded, click Convert. When the conversion is complete, click the filename on the results page to download it to your computer. You can now open it in Microsoft Word (see screenshot below left) or LibreOffice Writer.

5 Extract your images

Extracting images from documents is a little easier. Once again, the process starts with Windows Scan, but this time we'd recommend choosing a higher resolution. As a rule of thumb, it's worth trying to print at resolutions of 300dpi or higher if you care about quality. So, if you're hoping to produce a 5x8in photo from whatever you've scanned, you ideally need to produce a file that's 1500x2400 pixels.

For an 8x10in photo, you want a minimum of 2400x3000 pixels. Although you can make images larger in photo-editing software, we'd recommend trying to capture a high-resolution picture at the outset rather than resorting to software,



Drag the corners of the box over the image to define the area you want to scan

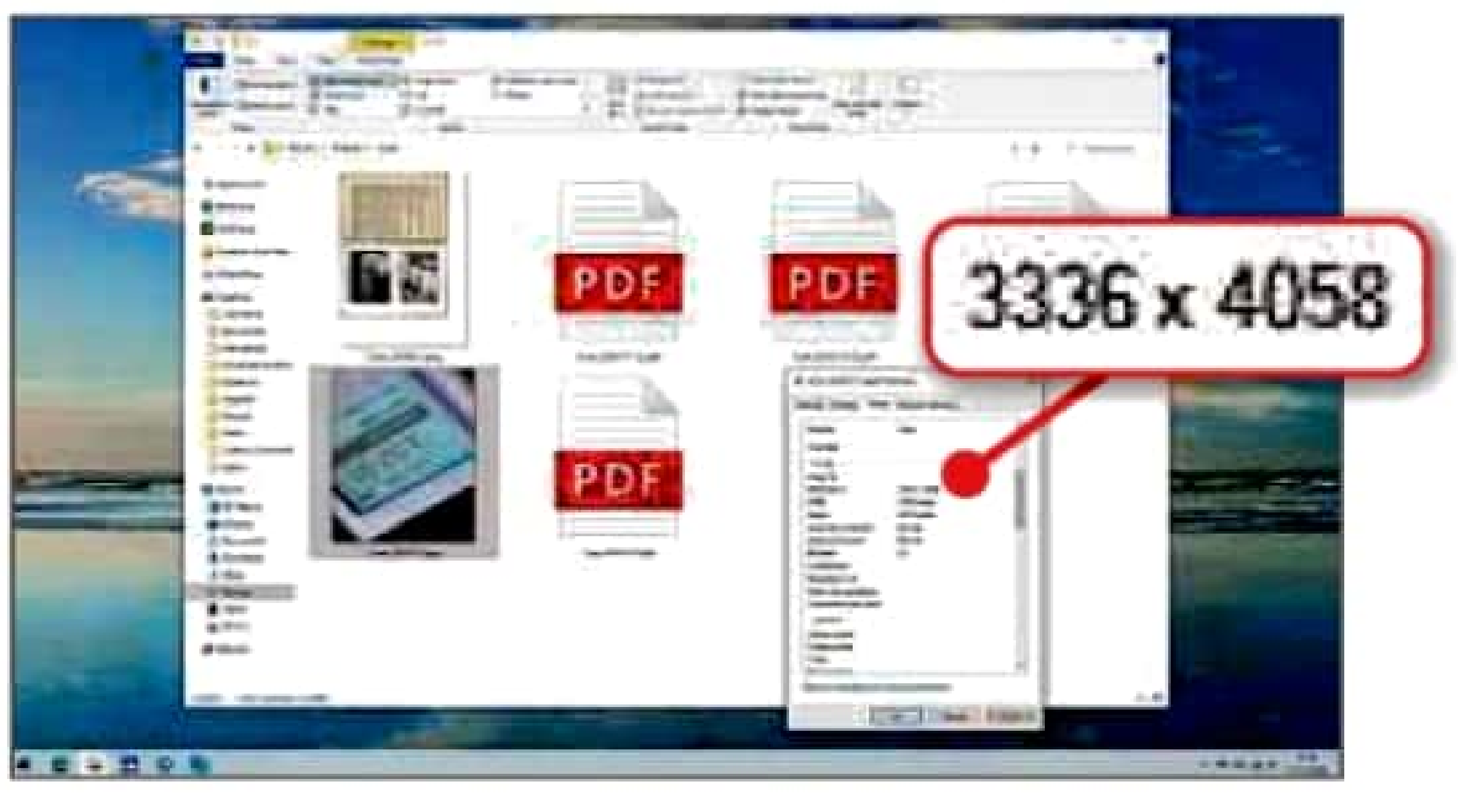
which can result in a softened result that lacks the crispness of the original. Bear this in mind for later.

Again, place the document containing your photo on the scanning bed and click Preview in Windows Scan. When Scan shows you what it can see, drag the corners of the box to define the area you want to scan (**1** in our screenshot above), select JPEG from the 'File type' menu **2**, and pick an appropriate resolution in the sidebar. We're starting with 600dpi **3**. Finally, click Scan **4**.

When it's finished capturing the image, open File Explorer and navigate to the Scans folder inside your Pictures directory. Now right-click the image you've just created and click Properties in the context menu. Switch to the Details tab and scroll down to Dimensions within the Image section. As you can see from our screenshot below, our image is 3336x4058 pixels.

If we wanted to print it at 300dpi, we could therefore produce a print of up to 11.1x15.5in, which is much larger than required. There's no need to re-scan it at a lower resolution, because compressing this many pixels on to a smaller piece of paper will – theoretically – result in an even higher-quality print.

However, if the result had been less than 1500x2400 pixels and we wanted to print at 5x8in or larger, we'd need to return to Windows Scan and capture the image for a second time, this time at a higher resolution.



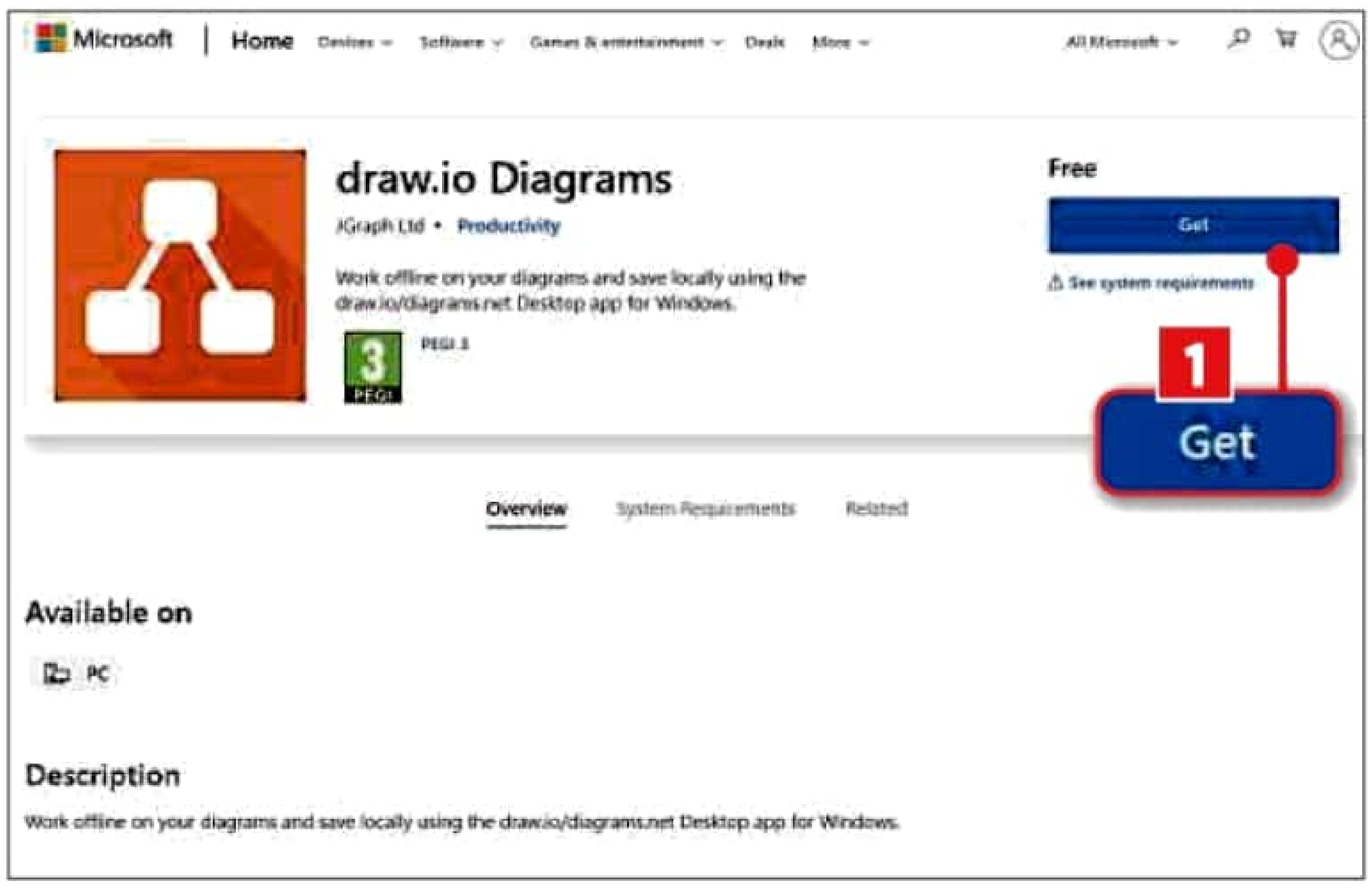
Right-click your image to check the pixel dimensions of your image

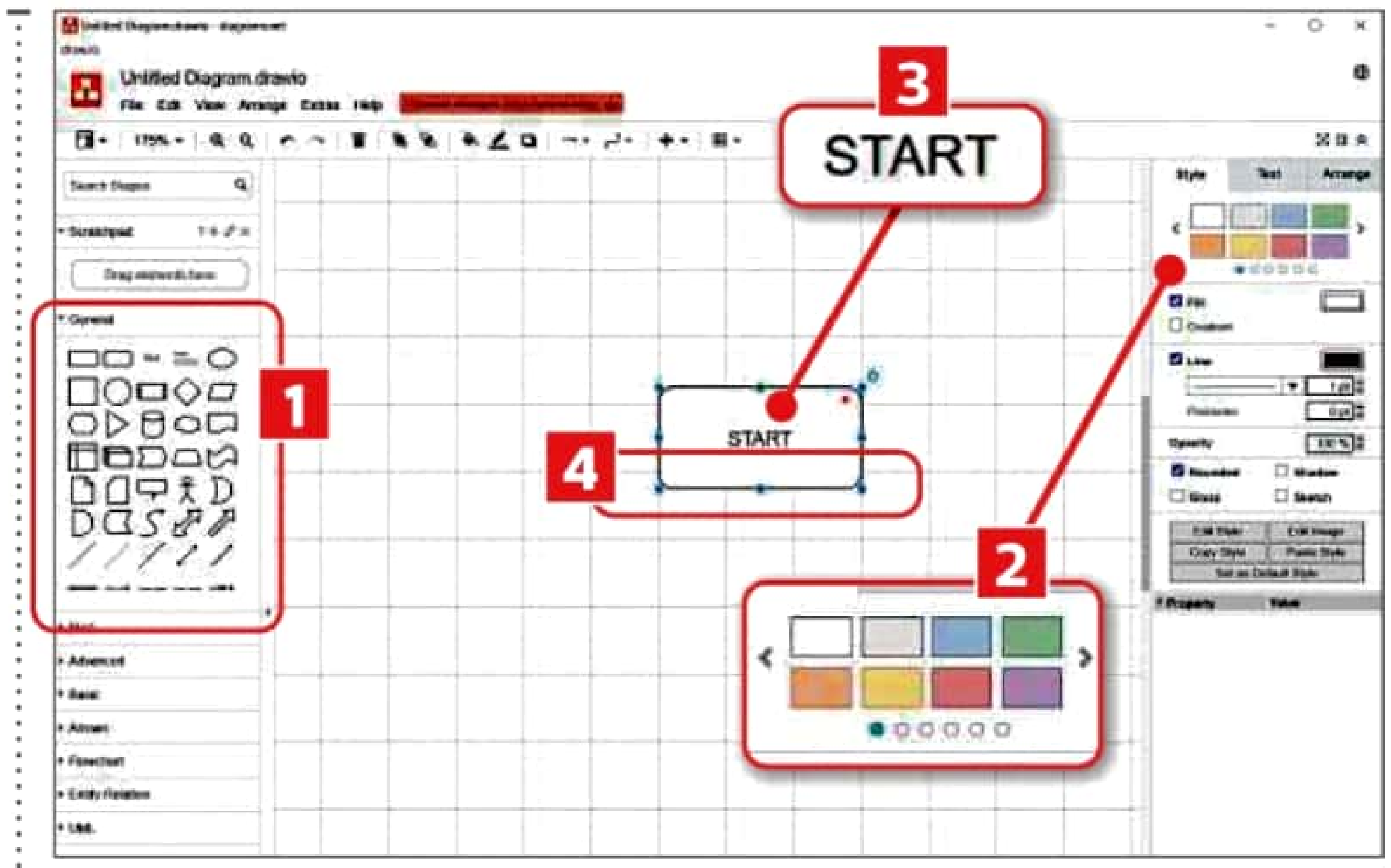
Workshop 1

Create a flowchart using free software

What you need: Draw.io; Windows 8, 8.1 or 10
Time required: 30 minutes

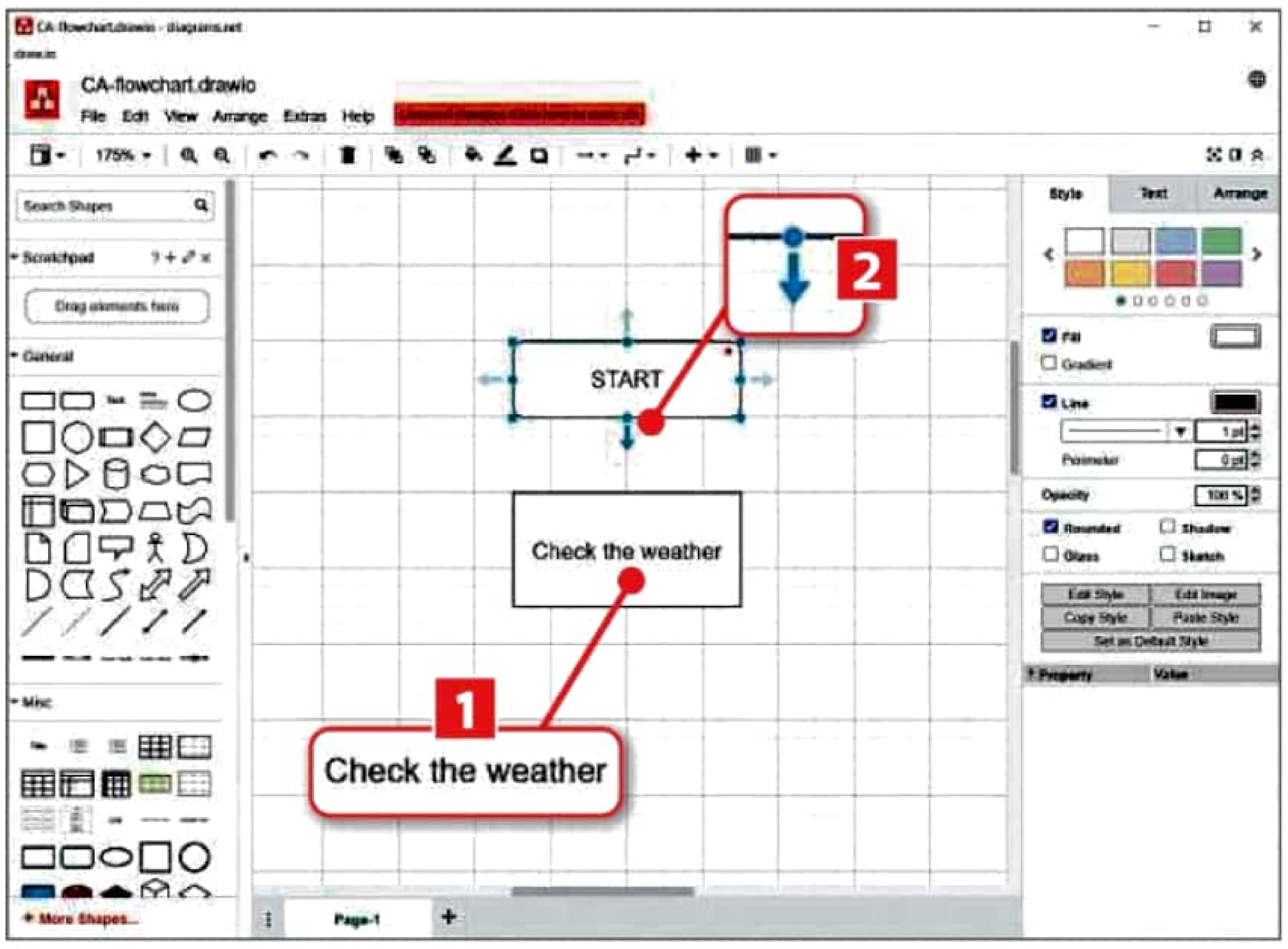
Flowcharts aren't just used by business executives to outline company strategies – they can also come in handy outside the office environment. If you run a local club, for example, you could create one to guide new members through the process of signing up. At home you could use one to show a friend how to use a particular device. However you use them, Draw.io is a free, straightforward tool that lets you create and share flowcharts with a minimum of fuss.


Microsoft
Home
draw.io Diagrams
JGraph Ltd • Productivity
Work offline on your diagrams and save locally using the draw.io/diagrams.net Desktop app for Windows.
PEGI 3
Free
Get
See system requirements
1
Get
Overview
System Requirements
Related
Available on
PC
Description
Work offline on your diagrams and save locally using the draw.io/diagrams.net Desktop app for Windows.

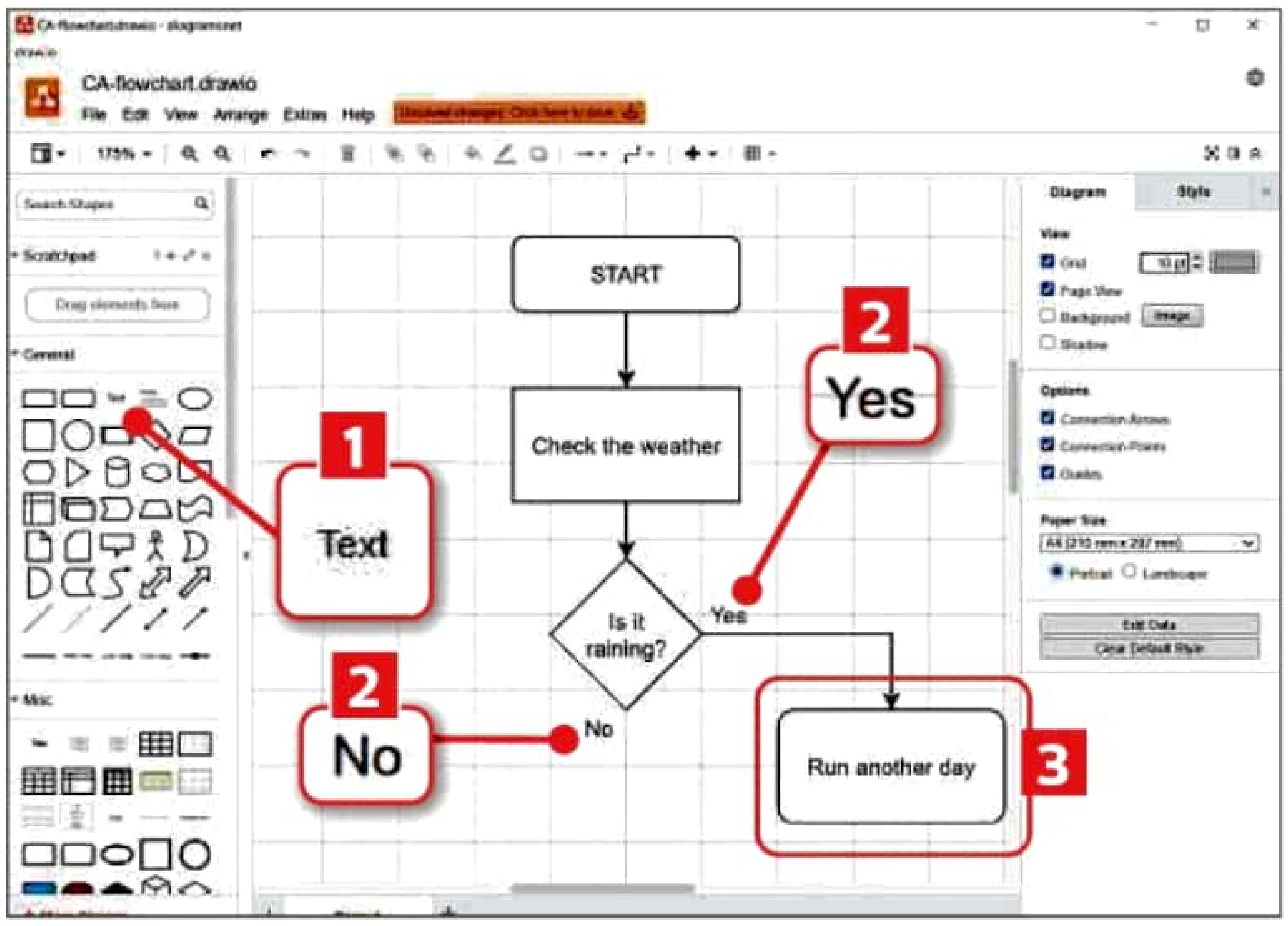

Untitled Diagram.drawio
File Edit View Arrange Extras Help
3
START
1
4
START
2
Style
Text
Arrange

STEP 1 Draw.io is available as both an online service that you access through your browser at www.draw.io and a downloadable tool for Windows. Both operate in a similar way. In this Workshop we'll use the downloadable tool, which you can install from the Microsoft Store at www.snipca.com/37127. Click Get **1** then, once the program has installed, launch it and select Create New Diagram when prompted. You can choose from a variety of templates, but we're going to create a flowchart from scratch, so click Blank Diagram.

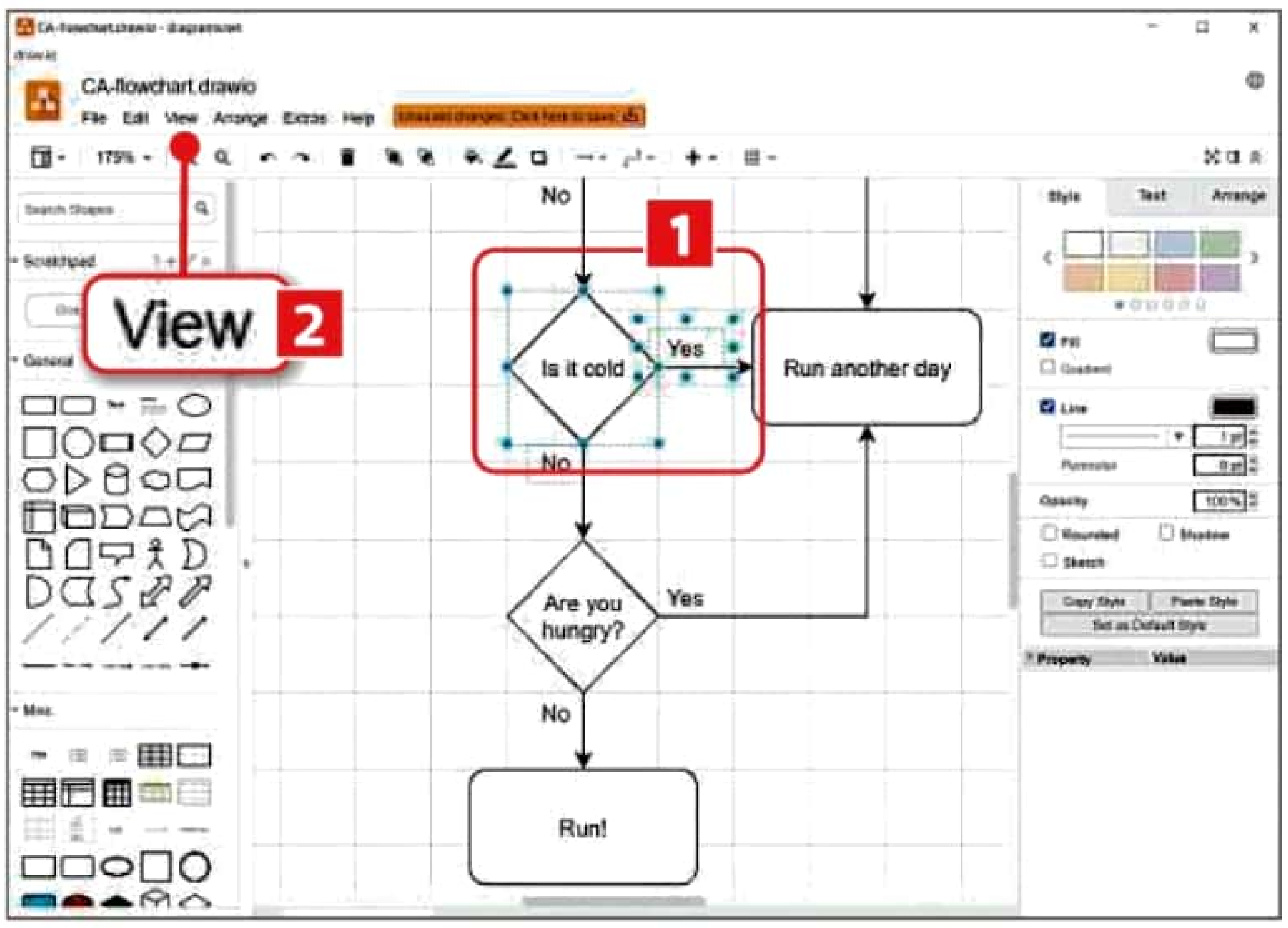
STEP 2 Most flowcharts use a rectangle with curved edges to indicate the start and end of the process. To insert one, drag and drop the shape from the left-hand panel **1** on to the middle of the canvas (main area in the centre). You can now enter text into the box by double-clicking it, while the right-hand panel lets you adjust the size and colour of the text **2**. On our flowchart, we've kept things simple by labelling the box 'Start' **3**. You can resize the box by clicking and dragging the blue circles around the edge **4**.


CA-flowchart.drawio
File Edit View Arrange Extras Help
START
2
Check the weather
1
Check the weather
Style
Text
Arrange
Page-1

STEP 3 In our example, we're creating a flowchart to map out the process of deciding whether or not to go for a run (yes, it's a bit tongue in cheek, but we've deliberately kept it simple to show how you can apply the instructions to most everyday tasks). The first step is to do a quick weather check. To show this, we'll select a rectangle shape (rectangles will represent 'actions' in our flowchart) from the left-hand panel, place it just below the Start box, then type Check the weather **1** in it. To link the two boxes, we'll hover over the Start box, then click and drag the blue arrow from the bottom of the box **2** to the top of the 'Check the weather' box. Once you've linked two boxes, they'll remain linked even if you move them across the canvas.

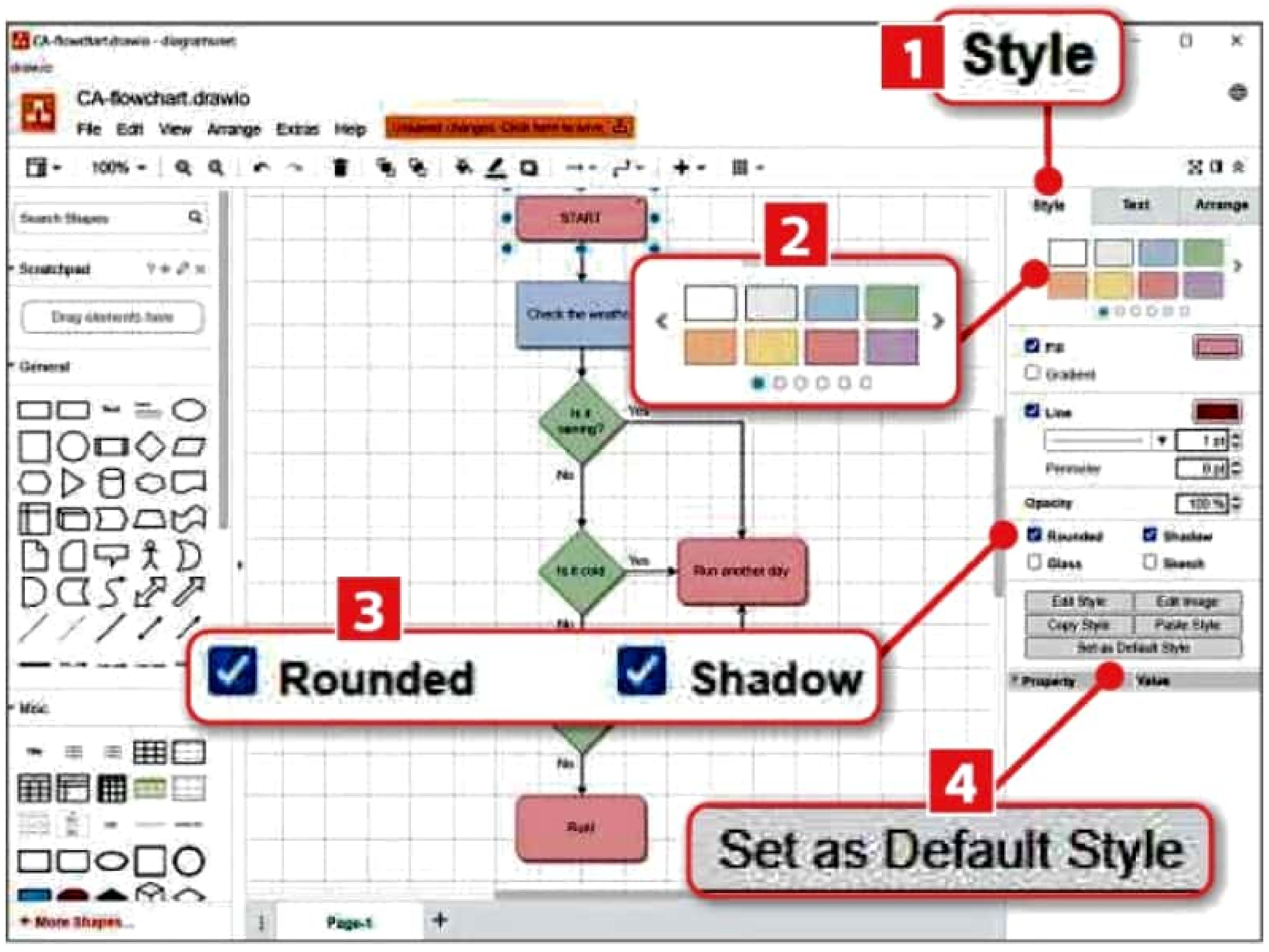

CA-flowchart.drawio
START
Check the weather
Is it raining?
Yes
No
Run another day
1 Text
2 Yes
2 No
3

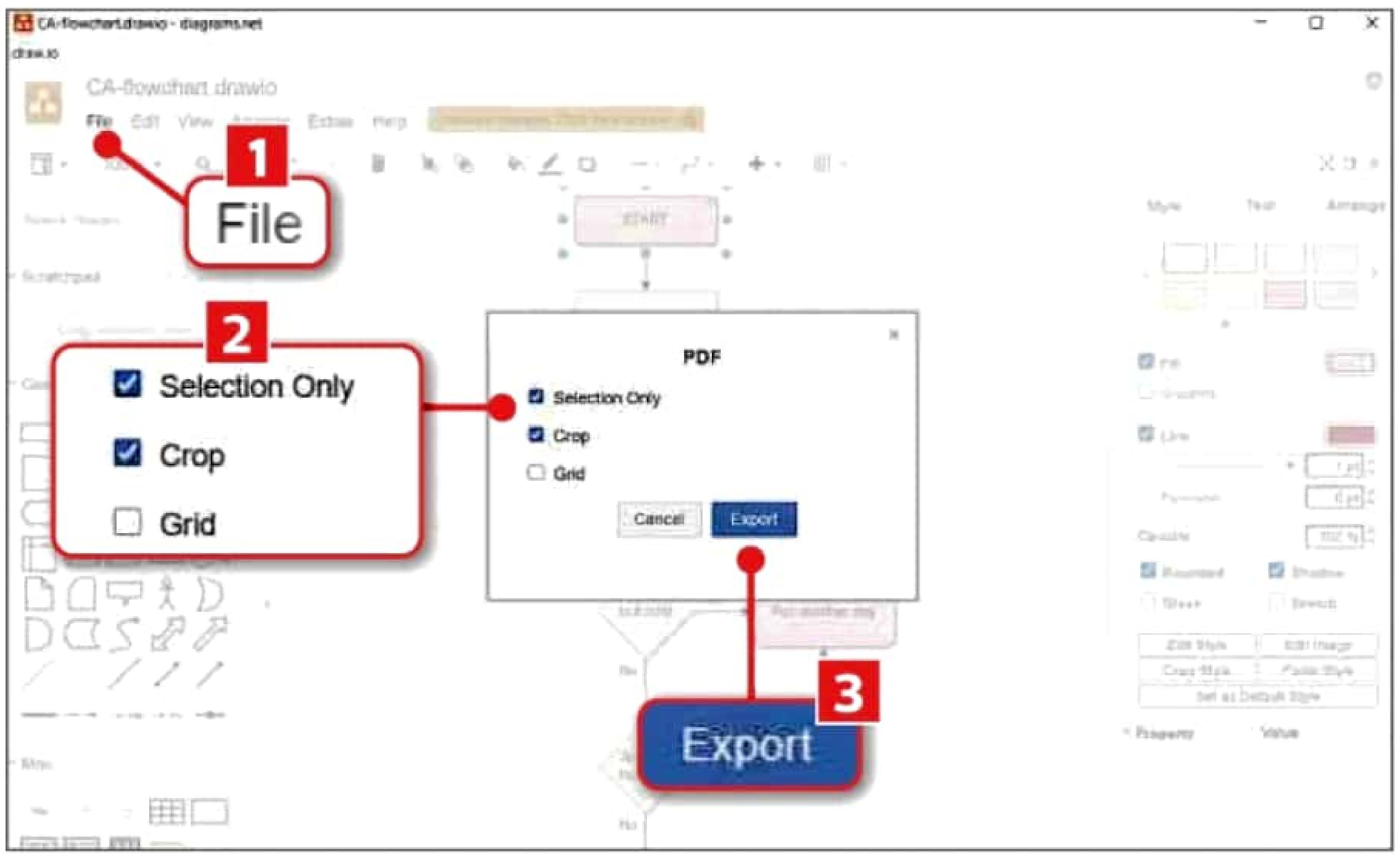
STEP 4 We'll now use a diamond-shaped box (diamonds will indicate a decision has to be made in our flowchart) and label it Is it raining?. We then insert two text boxes **1** and place them next to the decision box to mark two possible outcomes **2**. If there's even a hint of rain, we'll stay snugly indoors, so we link the Yes line to a curved rectangle (indicating the end of the process) with the label 'Run another day' **3**. If it's not raining, we link on to the next decision box.


CA-flowchart.drawio
View 2
1
No
Is it cold
Yes
Run another day
No
Are you hungry?
Yes
No
Run!

STEP 5 You can now flesh out the flowchart with the rest of your process's steps. To speed things up, you can quickly duplicate existing boxes - simply select them, press Ctrl+C to copy, then Ctrl+V to paste. To duplicate multiple boxes (such as a decision box along with its Yes and No options), hold down Ctrl while selecting them **1**. You can also zoom in and out of the flowchart by holding Alt and scrolling your mouse wheel, or using the zoom controls in the View menu **2**.

STEP 6 Draw.io also lets you customise your flowchart by changing its style and colour. As before, select the relevant boxes by holding down Ctrl and clicking them. Next, select the 'Style' tab **1** in the right sidebar, then choose a colour from the palette **2**. Further down the sidebar, you can add other effects including shadows and rounded edges to each box **3**. Click 'Set as Default Style' **4**, and each new box you add to your flowchart will use the same colour and styling.


CA-flowchart.drawio
1 Style
2
3
☑ Rounded
☑ Shadow
4
Set as Default Style
START
Run another day
Run!
Page-1


CA-flowchart.drawio
1 File
2
☑ Selection Only
☑ Crop
☐ Grid
PDF
☑ Selection Only
☑ Crop
☐ Grid
Cancel
Export
3 Export

STEP 7 To save your flowchart, press Ctrl+S. By default, Draw.io saves to its own '.drawio' file format, but you can choose others such as '.png' to save it as an image and '.html' if you want to publish it online. You can also export your flowchart as a PDF by selecting 'Export as...' from the File menu **1**, then PDF. Before exporting, Draw.io will ask you whether you want to export the entire flowchart or just a selection, whether it should be cropped (eliminating any unused areas on the canvas), and whether the grid should be displayed **2**. Click 'Export' **3** once you've made your choices.

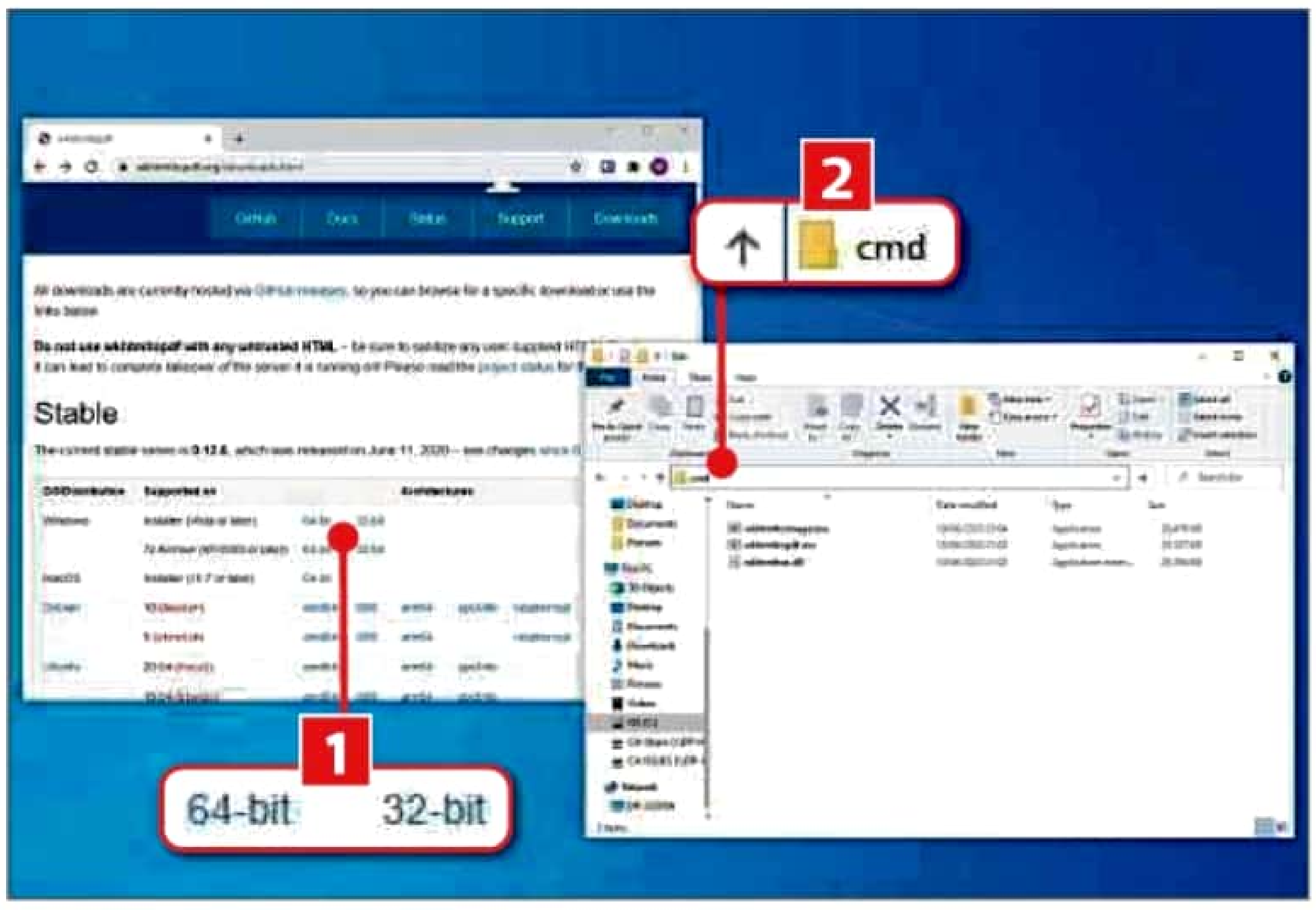
Workshop 2

Convert multiple web pages into a single PDF

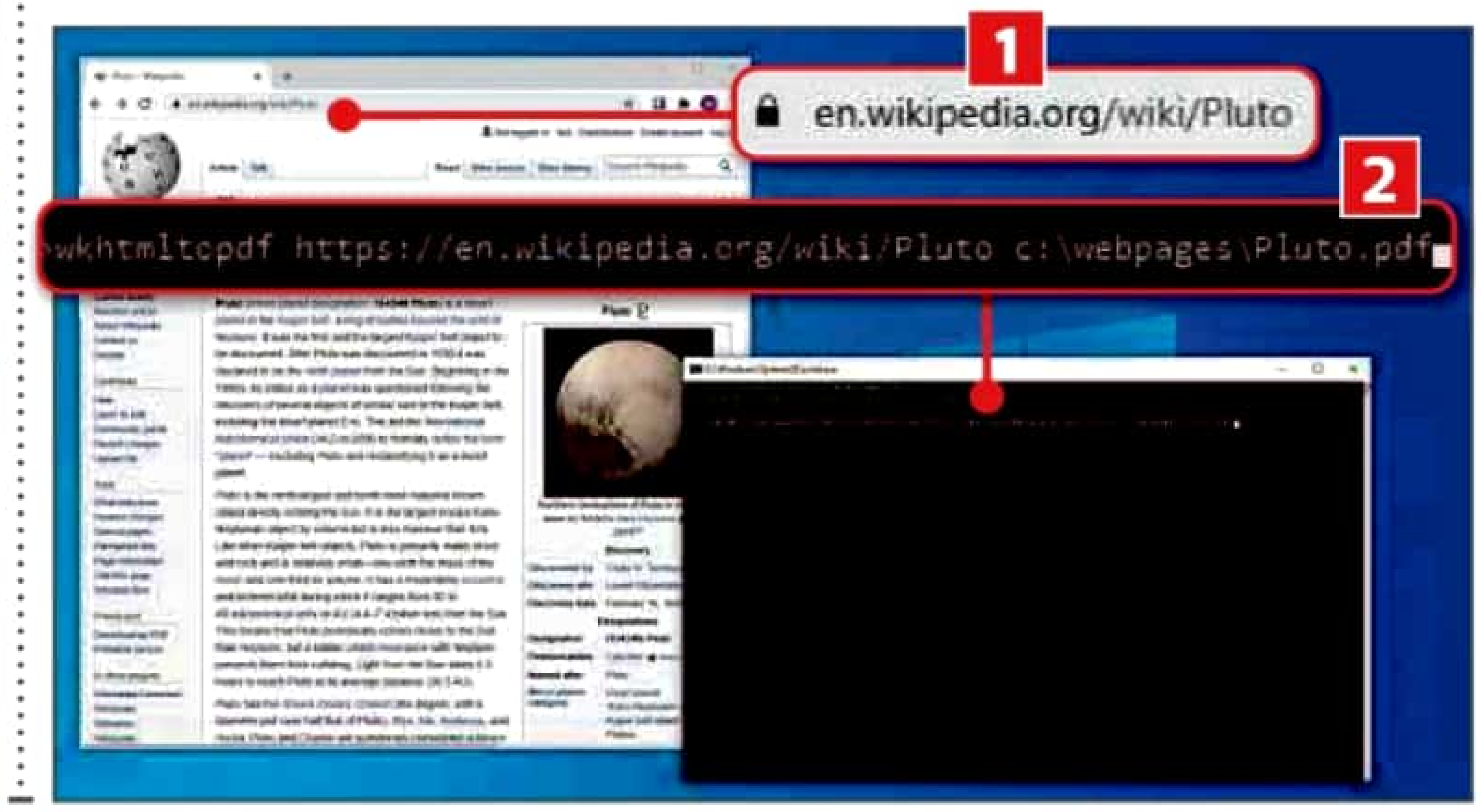
What you need: wkhtmltopdf; Windows 7, 8.1 or 10
Time required: 30 minutes

Saving a web page as a simple PDF isn't difficult – in your browser, press Ctrl+P, then select 'Save as PDF' (or similar) in the Destination box. However, what if you want to save more than one web page in the same PDF, remove images or apply other tweaks? To do that, you'll need wkhtmltopdf – a command-line tool that you run in Command Prompt. That may sound daunting, but as we reveal here, once you've learnt the basics it's a powerful tool that's great for converting multiple web pages into one searchable PDF.

STEP 1 To download the tool, go to www.snipca.com/37038 and select either the 32bit or 64bit version of the Windows installation file 1. Run the EXE file that downloads and follow the instructions to install the tool. Open File Explorer (press Windows key+E), then navigate to the tool's folder at **c:\program files\wkhtmltopdf\bin**. Next, press Alt+D to highlight the address bar in File Explorer, then type cmd 2 and press Enter. A Command Prompt window will now open.

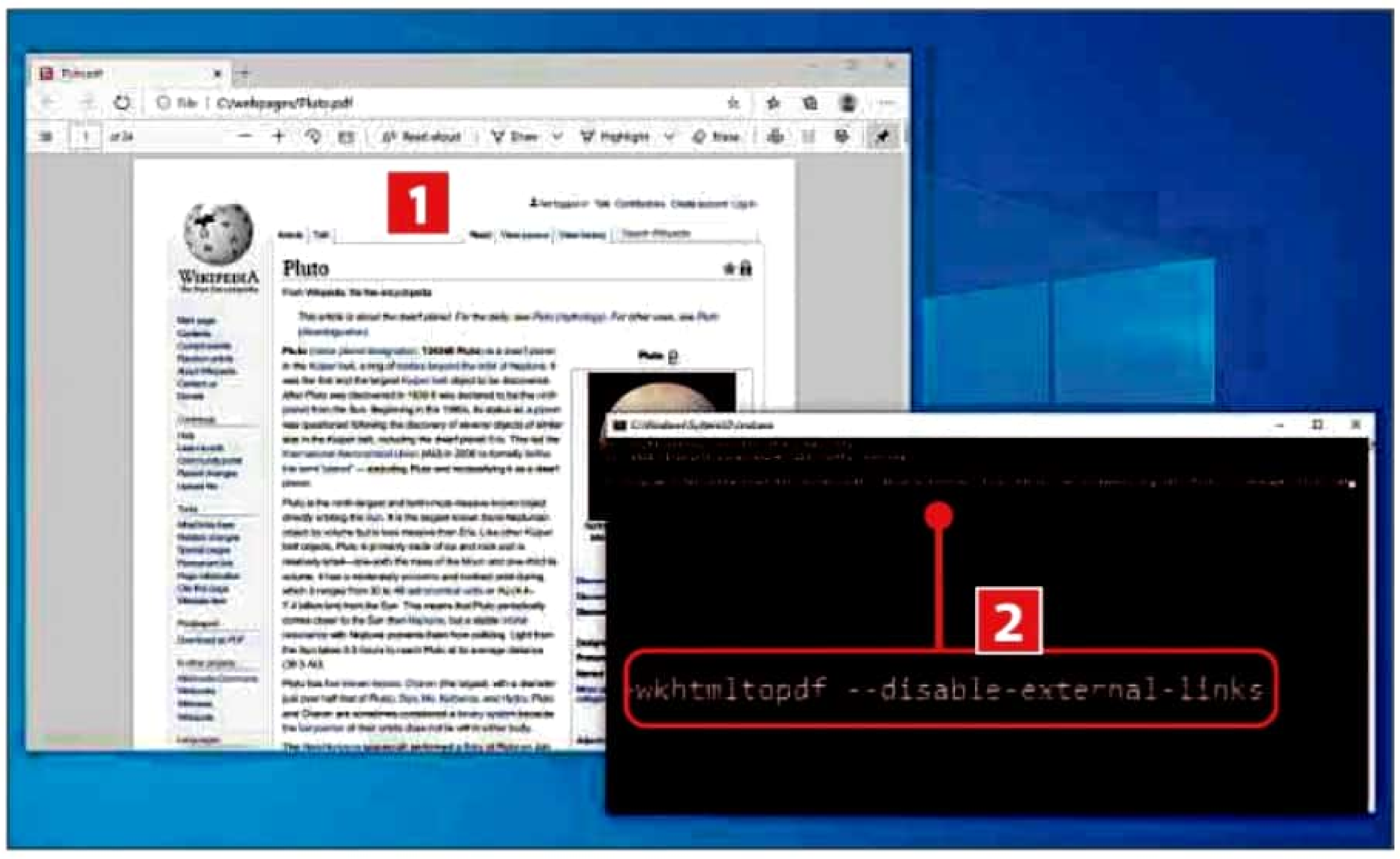


STEP 2 Open your browser and visit the web page you want to convert to a PDF, then copy its address (highlight the full address, then press Ctrl+C). In our example, we've opted for the Wikipedia page for the dwarf planet Pluto (https://en.wikipedia.org/wiki/Pluto 1). Return to the Command Prompt window, type wkhtmltopdf followed by a space, then press Ctrl+V to paste the address. Next, enter a space, then type the name and location of the PDF file that you want to create (we've created a new **c:\webpages** folder for ours). The full command in our example is therefore wkhtmltopdf https://en.wikipedia.org/wiki/Pluto c:\webpages\Pluto.pdf 2. Press Enter to run the command.

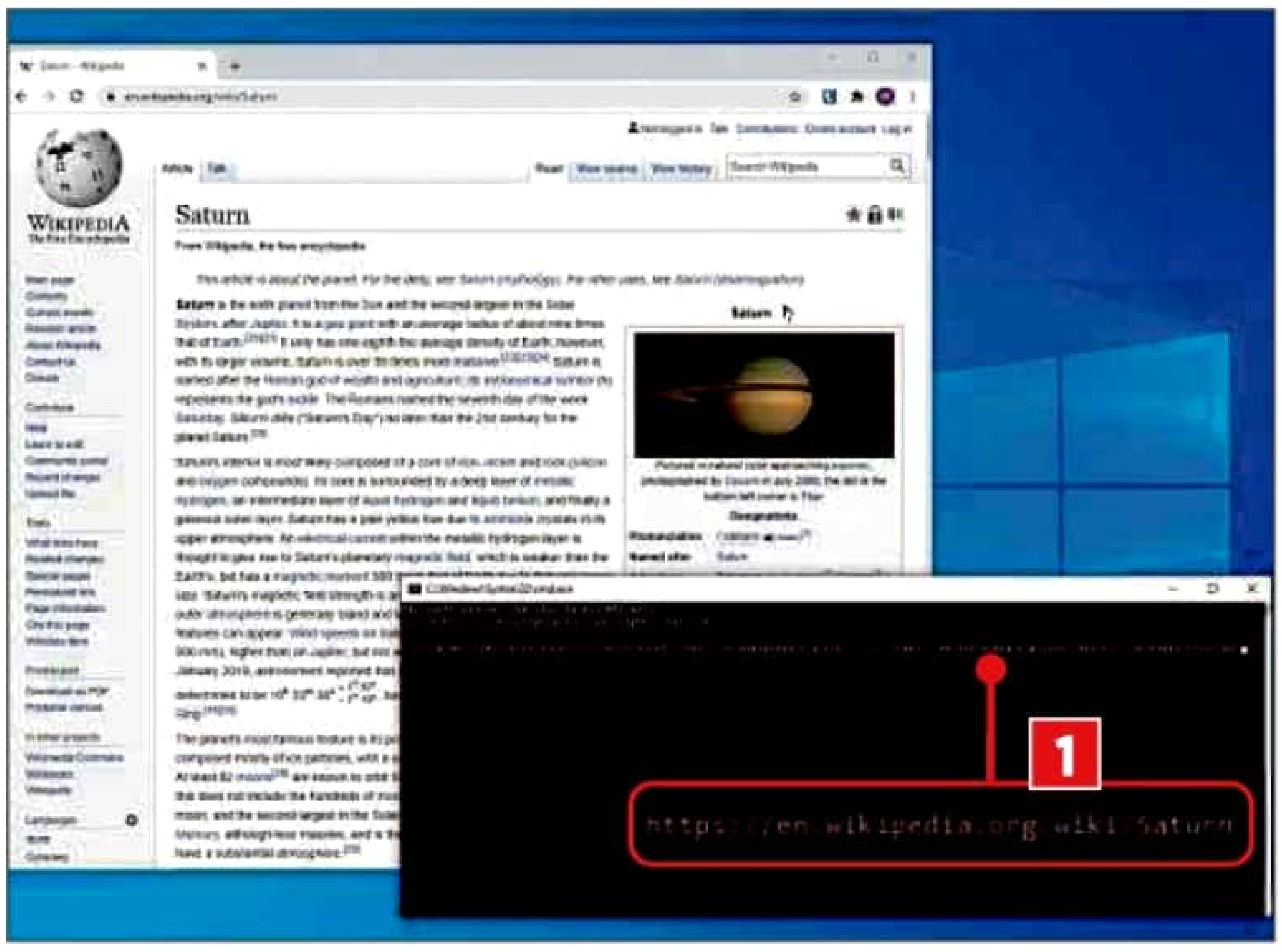


```
wkhtmltopdf https://en.wikipedia.org/wiki/Pluto c:\webpages\Pluto.pdf
```

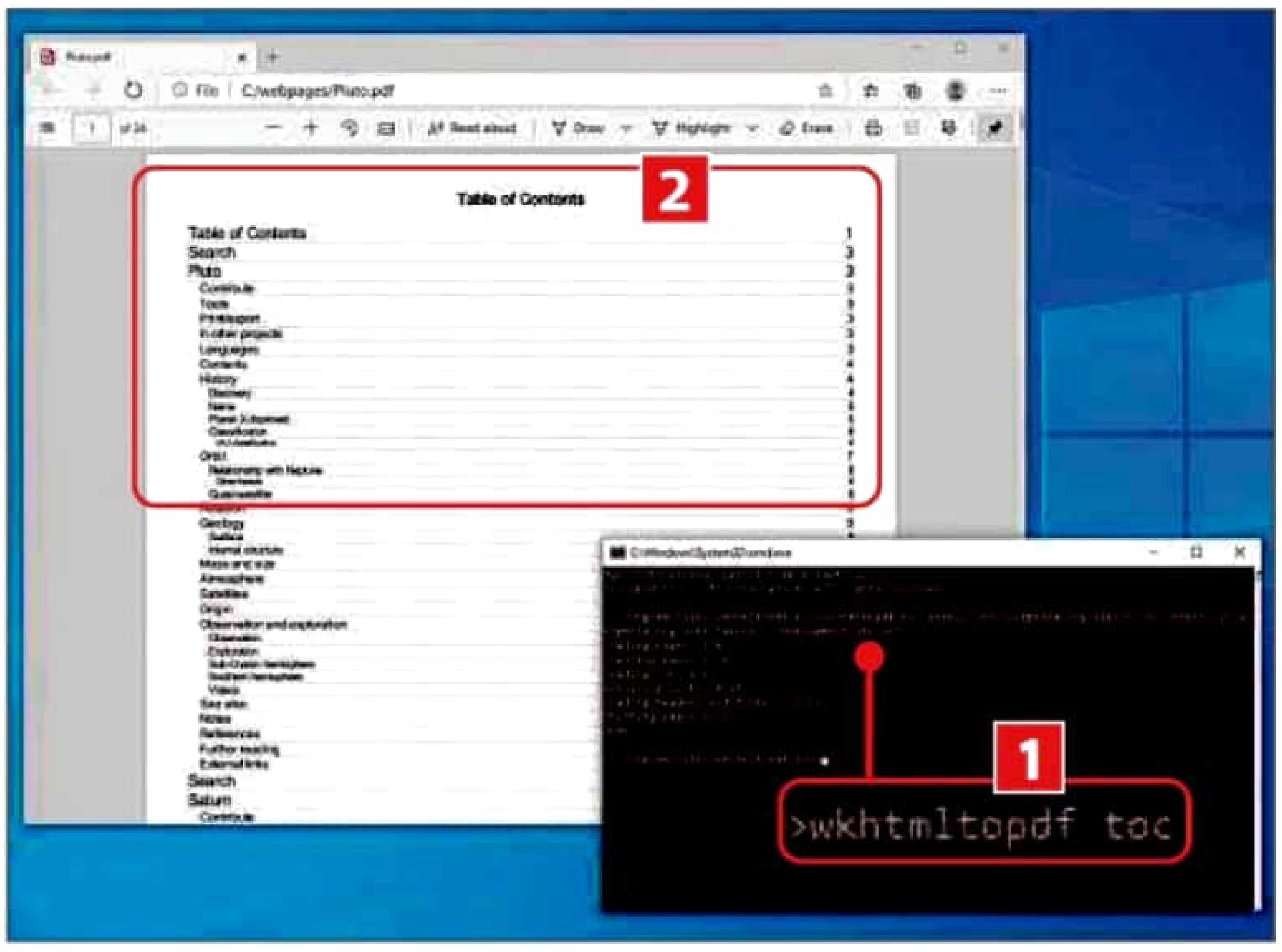
STEP 3 The tool will now start converting the web page into a PDF. Once it's finished, open File Explorer and navigate to the folder you chose to save the PDF in (**c:\webpages**, in our example), then double-click the PDF to open it. As you can see, ours shows an exact replica of the Pluto page on Wikipedia 1. By default, all links on the page are clickable – if you click on one, it will open in your default browser. If you'd prefer to save a web page without active links, type --disable-external-links after 'wkhtmltopdf' at the start of your command 2.



```
wkhtmltopdf --disable-external-links
```



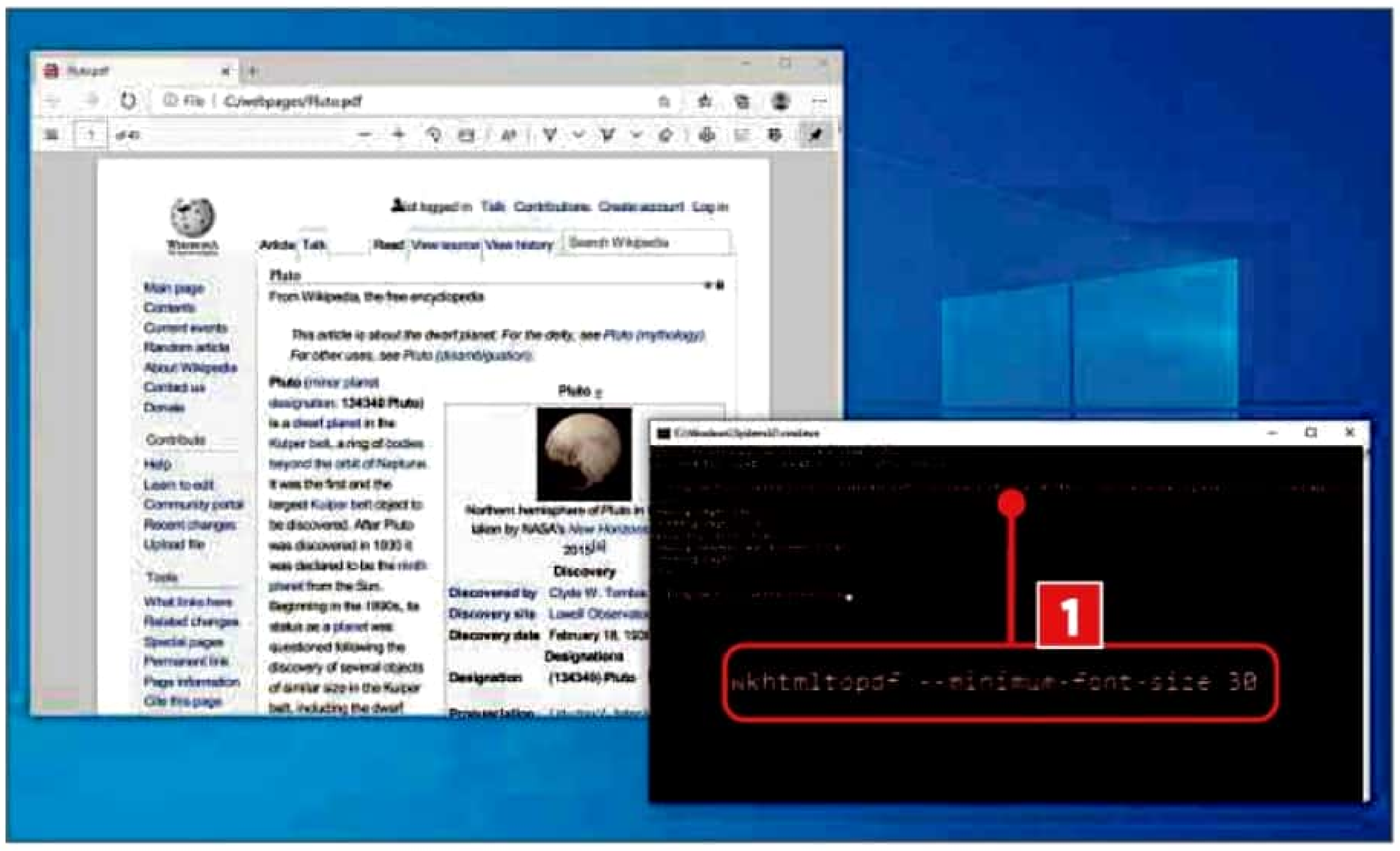
```
https://en.wikipedia.org/wiki/Saturn
```



```
>wkhtmltopdf toc
```

STEP 4 To include multiple web pages in your PDF, simply add their addresses to the command with a space between each. The order you enter them in your command dictates the order they appear in the PDF. In our example, we've added the Wikipedia page for Saturn to our PDF **1**. You can continue adding as many pages as you like – just remember to add the file path and name of the PDF at the end. If you want to reduce the size of your PDF, you can remove images using the --no-images option (as before, you need to enter this after 'wkhtmltopdf' at the start of the command).

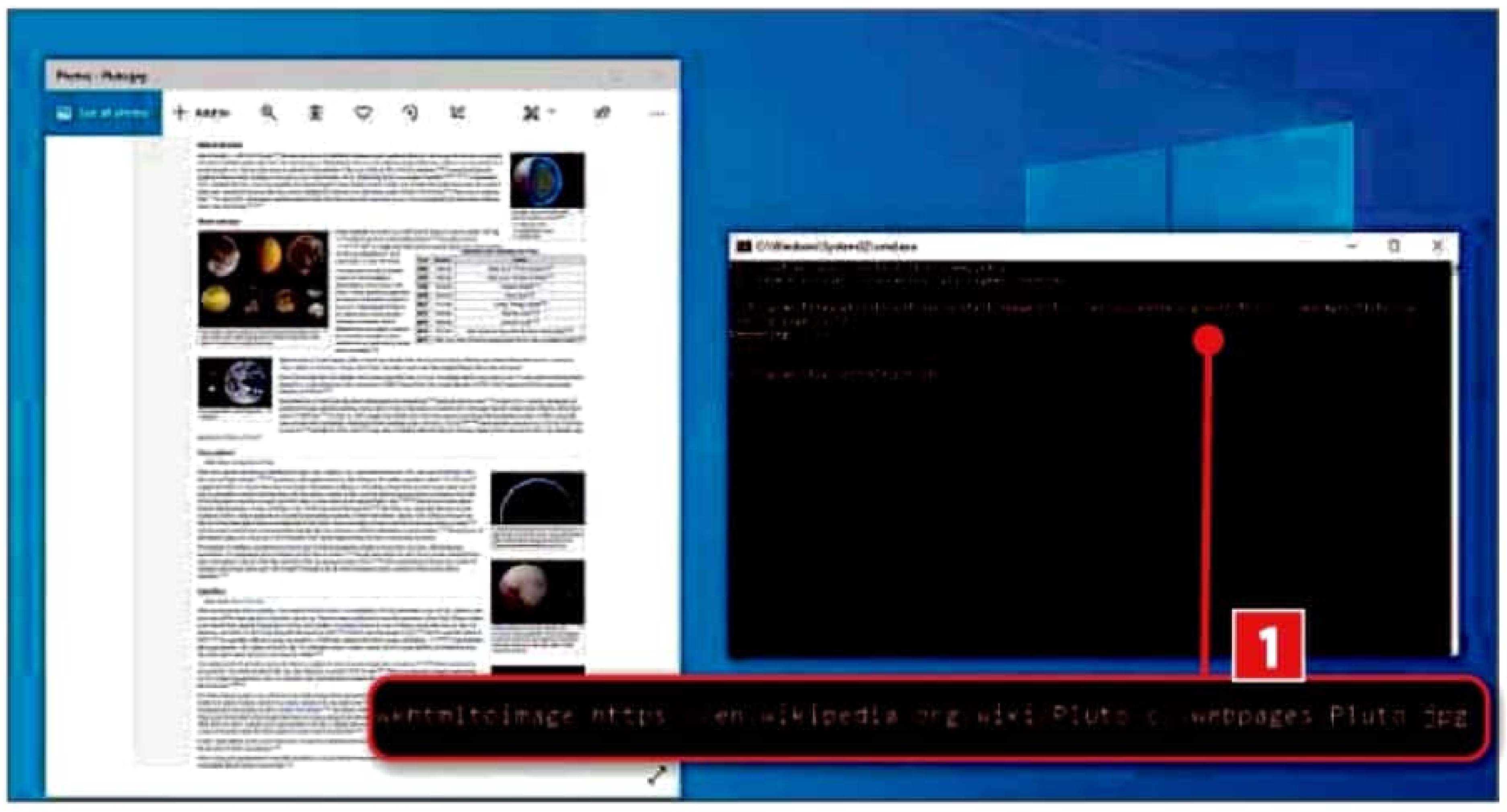
STEP 5 If the web pages you're converting are fairly long, you can make it easy to navigate them by adding a page of contents at the start. To do this, begin your command with wkhtmltopdf toc **1**. Once created, open the PDF and you'll see a page at the start with links to each web page in the PDF and any sections within them **2**. To go directly to a section, click the relevant link within the table of contents.



```
wkhtmltopdf --minimum-font-size 30
```

STEP 6 There are plenty of other options that let you tweak how your PDF looks – you can view them all by typing wkhtmltopdf -H (making sure the 'H' is uppercase). For example, if you want to increase the font size to 30pt, add the command --minimum-font-size 30 **1** (just after the 'wkhtmltopdf'). If you're converting multiple pages, adding this option applies the font size to *all* web pages. Alternatively, you can add it only to specific pages by placing the option after the appropriate addresses.

STEP 7 You can also convert web pages to image files, but there are a couple of caveats. Because this involves converting to JPEGs, you won't be able to search the text within them (as you can with a PDF). Additionally, you can't convert multiple web pages into a single JPEG. To give it a go, type wkhtmltoimage followed by the web page address you want to convert and the name and location for the JPEG file. To convert the Pluto Wikipedia page, we would type wkhtmltoimage https://en.wikipedia.org/wiki/Pluto c:\webpages\Pluto.jpg **1**.



```
wkhtmltoimage https://en.wikipedia.org/wiki/Pluto c:\webpages\Pluto.jpg
```

Readers' Tips

TIP OF THE FORTNIGHT

Install Windows 10 on an old Sony Vaio laptop

I have a Sony Vaio 17in i5 laptop (8GB RAM and a 500GB SSD, pictured) that refused to upgrade from Windows 7 to Windows 10 due to driver and hardware problems. I had just reinstalled Windows 10 on an old Dell OptiPlex PC that I'd bought refurbished from Amazon at a bargain price. I had fitted an SSD to clone the original hard drive that was running Windows 10.

I then had the idea to make a further clone of the drive (also on an SSD) and installed it into my Sony Vaio laptop. I had nothing to lose, after all.

The laptop booted up instantly in Windows 10, running the 2020 October Update (version 20H2) – so it was totally up to date. I then ran the free program SnailDriver (www.snipca.com/37053), which identified a few drivers that were promptly installed.

I now have a fully updated and operational large-screen laptop, though I did have to purchase a new Windows 10 licence as it would not accept the original Windows 7 licence. Maybe other Sony Vaio users could take advantage of this.

Andrew Hurley

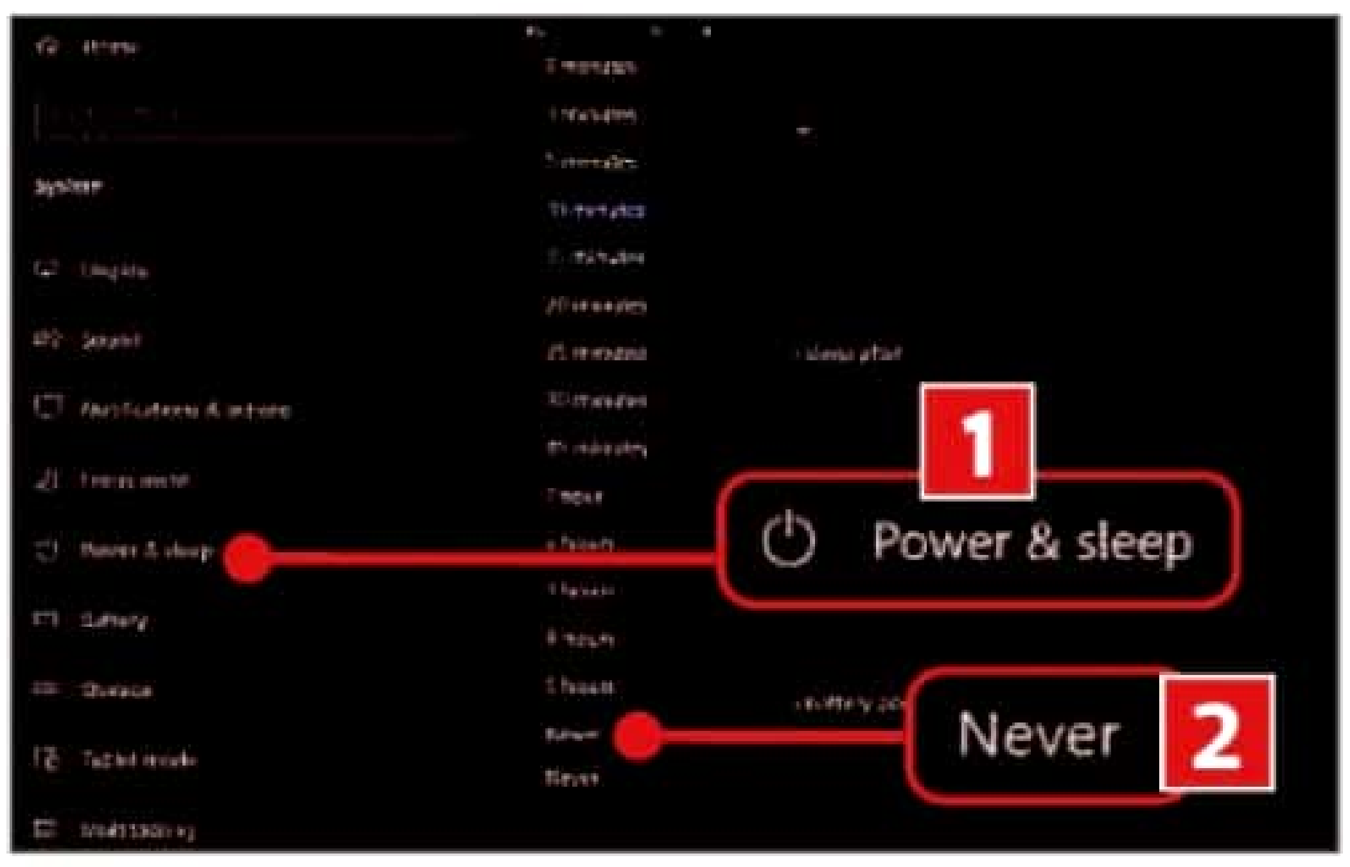
Andrew wins a copy of our 2020 Back Issue CD **Buy it on Amazon www.snipca.com/37026**

active
2020
BACK ISSUE CD

WINDOWS

Set sleep to 'never' before installing large updates

The letter from Stephen Brickley in Issue 594 ('Stuck on last autumn's jumbo-sized Windows update', page 13) chimed with my own experiences of downloading huge updates. Like him, I've often spent days on a speed of 1.5Mbps (if lucky) trying to download the latest improvement to Windows 10, sometimes to be greeted at the end with 'Download Failed!'.



My solution, which so far has worked every time, is to set my laptop to 'never' go to sleep before updating. Do this by opening Settings (press Windows key+I), followed by System, then 'Power & sleep' on the left (1 in our screenshot below left). Click the Sleep dropdown menu then select Never at the bottom 2.

With this selected, I start the update at 10pm(ish) and go to bed. Next morning, everything has been updated. I then reopen the Sleep dropdown menu and revert to one hour.

Mike Short

HARDWARE

Connect your iPad to an Ethernet cable

Readers who use an iPad as their daily computer may be interested to know they can use Ethernet for a more stable and faster connection. This is useful when downloading large files, such as a film or photo collection. You'll need a Lightning-to-Ethernet adapter (such as this one priced £26: www.snipca.com/37048), or a USB-C-to-Ethernet adapter (for recent iPad Pro and Air models visit www.snipca.com/37050, pictured – they're priced around £14).

Simply insert the adapter into your iPad's port then plug an Ethernet cable into the adapter. Open the iPad's Settings app and you'll see an 'Ethernet' section at the top – this will confirm that the iPad recognises the connection. You can then turn Wi-Fi off by tapping 'WiFi' then moving the green slider.

Benjamin Ward

Why I stopped using...

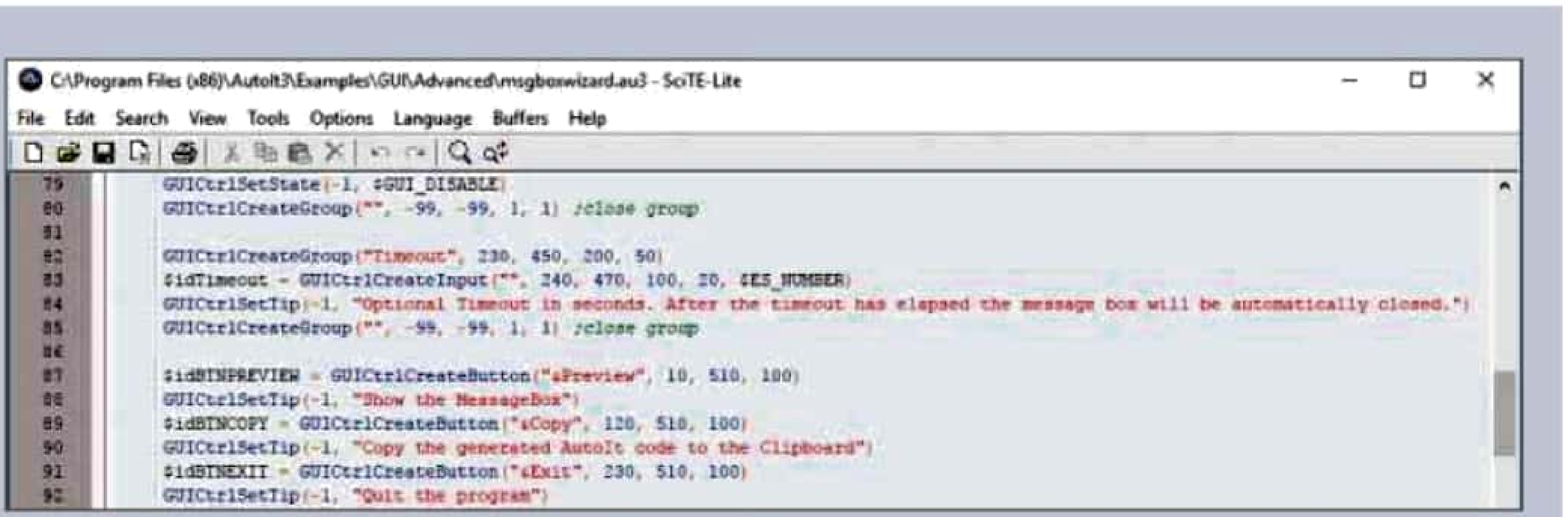
Batch files

Following your How To in Issue 595 (page 35) on running PC tasks automatically using batch files, I used to do this but eventually switched to something more advanced.

And what I use instead...

I now use **AutoIt** (www.autoitscript.com, pictured), which is the ideal introduction to coding, and makes it easy to automate quite complex batch commands. This scripting language goes far beyond just batch processing – it also works with other software interactions, and GUIs created by other people. If you write Microsoft macros, AutoIt fills all the 'missing' functions, so you can convert to an EXE file for spreadsheets.

Mike Harris

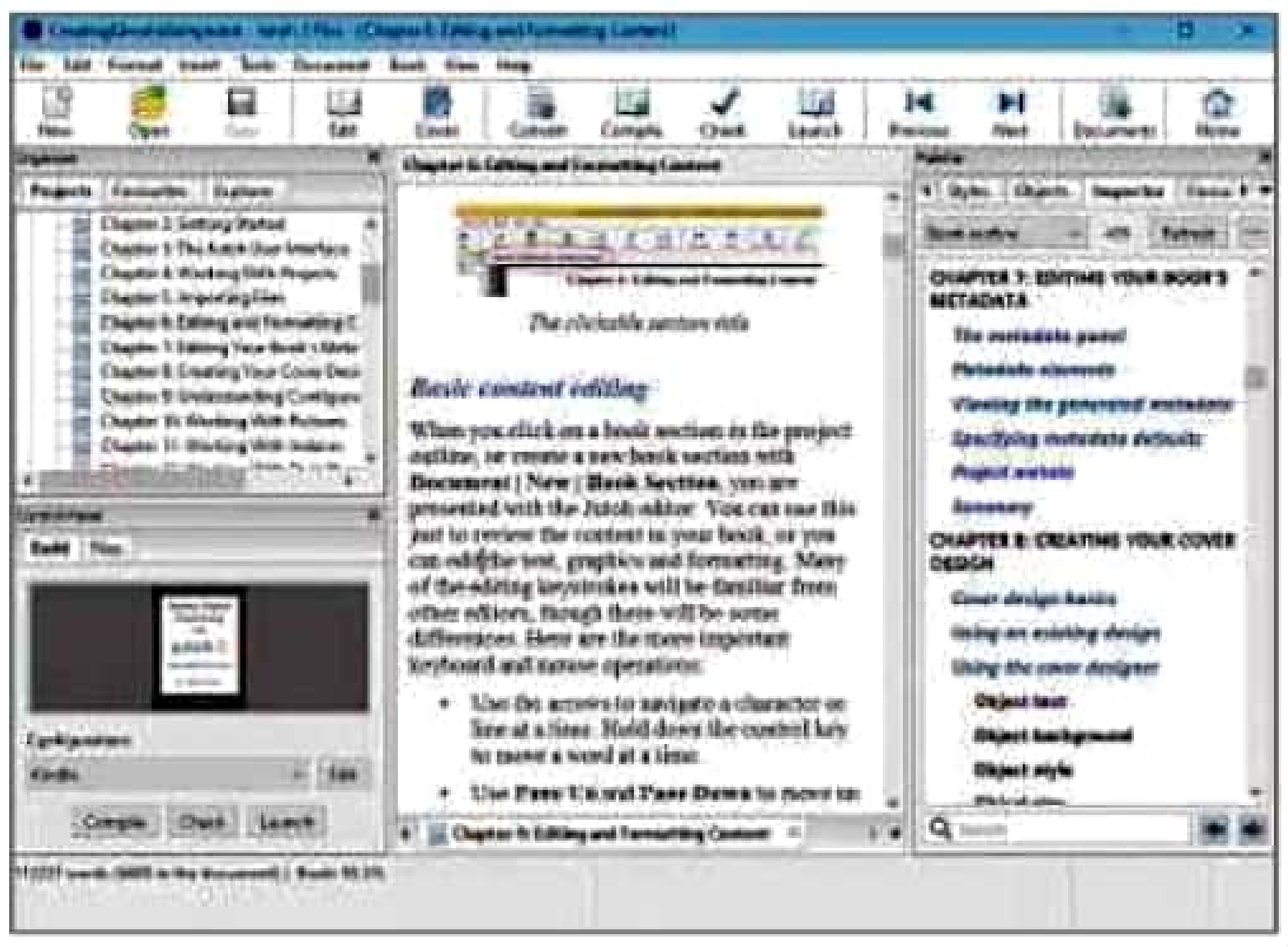

C:\Program Files (x86)\AutoIt3\Examples\GUI\Advanced\msgboxwizard.au3 - SciTE-Lite
File
Edit
Search
View
Tools
Options
Language
Buffers
Help

```
GUICtrlSetState(-1, $GUI_DISABLE)
GUICtrlCreateGroup("", -99, -99, 1, 1) ;close group

GUICtrlCreateGroup("Timeout", 230, 450, 200, 50)
$idTimeout = GUICtrlCreateInput("", 240, 470, 100, 20, $ES_NUMBER)
GUICtrlSetTip(-1, "Optional Timeout in seconds. After the timeout has elapsed the message box will be automatically closed.")
GUICtrlCreateGroup("", -99, -99, 1, 1) ;close group

$idBTNPREVIEW = GUICtrlCreateButton("&Preview", 10, 510, 100)
GUICtrlSetTip(-1, "Show the MessageBox")
$idBTNCOPY = GUICtrlCreateButton("&Copy", 120, 510, 100)
GUICtrlSetTip(-1, "Copy the generated AutoIt code to the Clipboard")
$idBTNEXIT = GUICtrlCreateButton("&Exit", 230, 510, 100)
GUICtrlSetTip(-1, "Quit the program")
```

Tell us why you stopped using a website, app or program: letters@computeractive.co.uk



SOFTWARE

Create ebooks in any format using Jutoh

For a number of years I've created ebooks using the Jutoh program (see screenshot above) from Anthemion Software (£35 from www.jutoh.com). It's a much better tool than some of the early ebook-creation software such as Mobipocket Creator and TomeRaider 3.

I load a Word docx file into Jutoh, where it can be edited to add title, author, chapter sections, a table of contents and a cover. Jutoh can then produce ebooks in both the EPUB format and MOBI (for Kindle).

With experience, it's possible to improve the quality of the ebook, helped by Anthemion's excellent free user guide book (www.jutoh.com/books.html). I still have a great deal to learn about creating ebooks but Jutoh is worth every penny of the purchase price.

Ted Cross

Reader recommends...

1080P FullHD Webcam

£17 from eBay www.snipca.com/37047

I've never been satisfied with the picture or sound quality of webcams. I recently decided to go for a better cam and found that HD models are finally available for less than £20. I bought this unbranded webcam from eBay, which arrived soon after I ordered it.

I fitted it into an available USB 2.0 port and tested it immediately through Skype. All working good! Then came Zoom meetings with my family. They were flabbergasted by the quality of the picture.

It has a microphone built in, and the lens needs no focus adjustment. I have two small halogen lamps near the webcam, and their intensity is no longer a problem as it was with my old cams. Last but not least, focusing from close to far is absolutely perfect. My old webcams (all six of them) will be given to a local school.

Claude Legrand

✉ **Want to recommend hardware or software to fellow readers?**
Email letters@computeractive.co.uk

HARDWARE

Update drivers manually to get keyboards working again

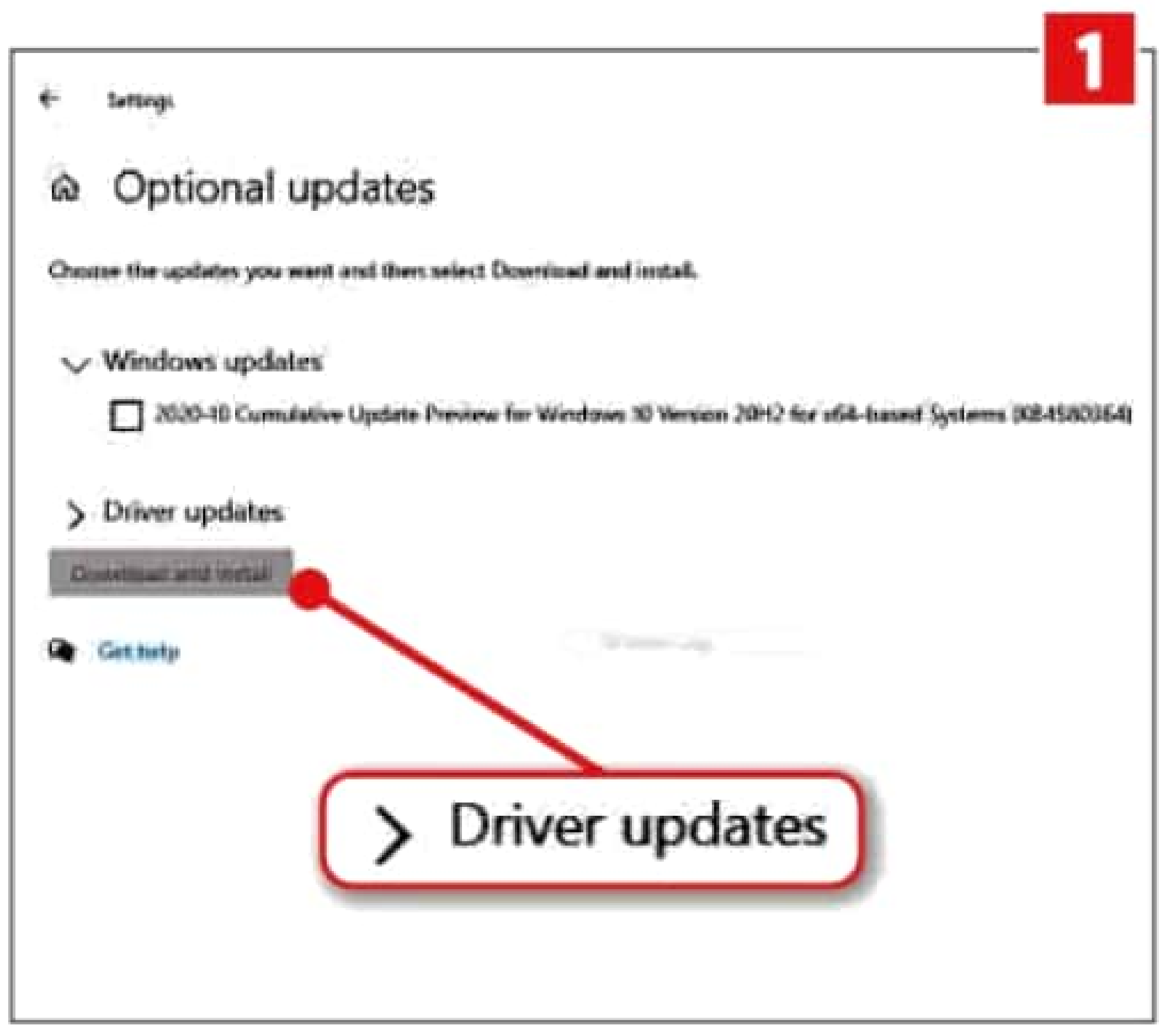
Thanks *Computeractive* – you've saved me over £100! How? Very recently my Cat7 keyboard gave up the ghost. It would flash when I plugged in the USB cable then die.

I diagnosed the problem as a faulty power supply in the cabling, so I went out to buy a new mechanical keyboard. As I was en route to buy one, I bought Issue 593 and saw the news article on page 6 about errors appearing because Windows has stopped automatically updating some drivers.

I promptly returned home and put into action your suggested fix, which is to install driver updates yourself. You need to open Settings (press Windows key+I) then click 'Update & Security' to open the Windows Update page. Next, under 'Check for updates', click the small blue 'View optional updates' link. Click 'Driver updates' (see screenshot 1 above right) on the following page, then tick the updates you want to install followed by 'Download and install' at the bottom (see screenshot 2).

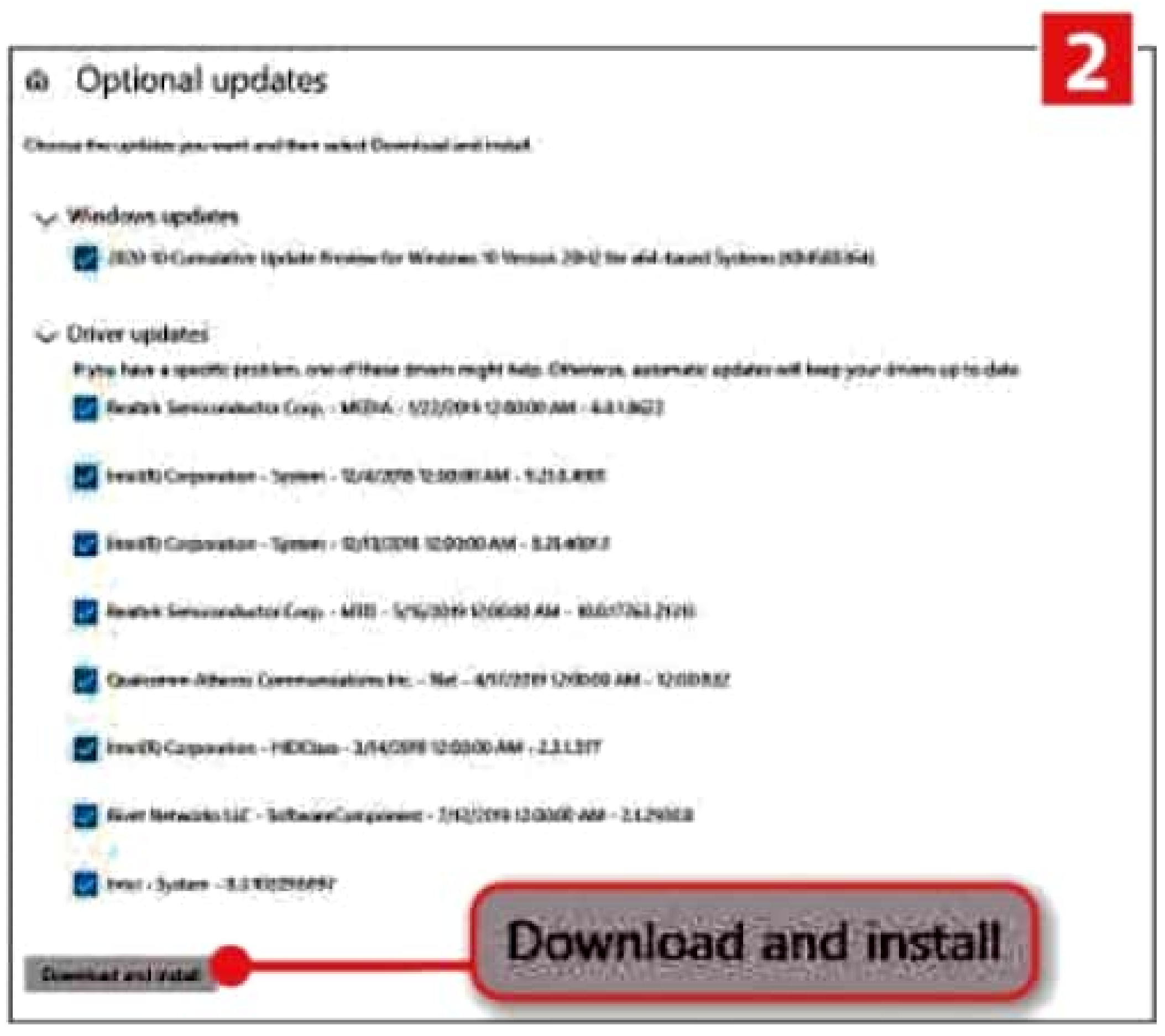
It worked like a treat, and my keyboard flashed back into life – in fact I'm using it to write this email. Once again, thank you.

Wayne Zappa



Choose the updates you want and then select Download and install.

☐ 2020-10 Cumulative Update Preview for Windows 10 Version 20H2 for x64-based Systems (KB4580364)



TV

Watch Freeview TV on your PC monitor

In Issue 594's Problems Solved (page 67), Brian Hillier asked if he could turn a monitor into a TV using a Freeview digital box. The answer you gave wasn't very encouraging. Well, I've been doing precisely this ever since the analogue TV broadcasts were switched off.

I don't own a TV set. Instead, I have a Humax Freeview box with two tuners that also records. The output is fed into an AOC 24in PC monitor with speakers via an HDMI cable. As the speaker sound is poor, I use the headphone socket on the rear of the screen to feed a pair of Creative PC speakers.

The Humax box has twin tuners, so I can watch one programme while recording a second. Because certain TV channels are multiplexed, I can sometimes be recording two programmes while watching a third!

Depending on the model of Freeview box, it may also be possible to watch iPlayer, Netflix and other streaming services. Who needs a TV?

Richard Williams

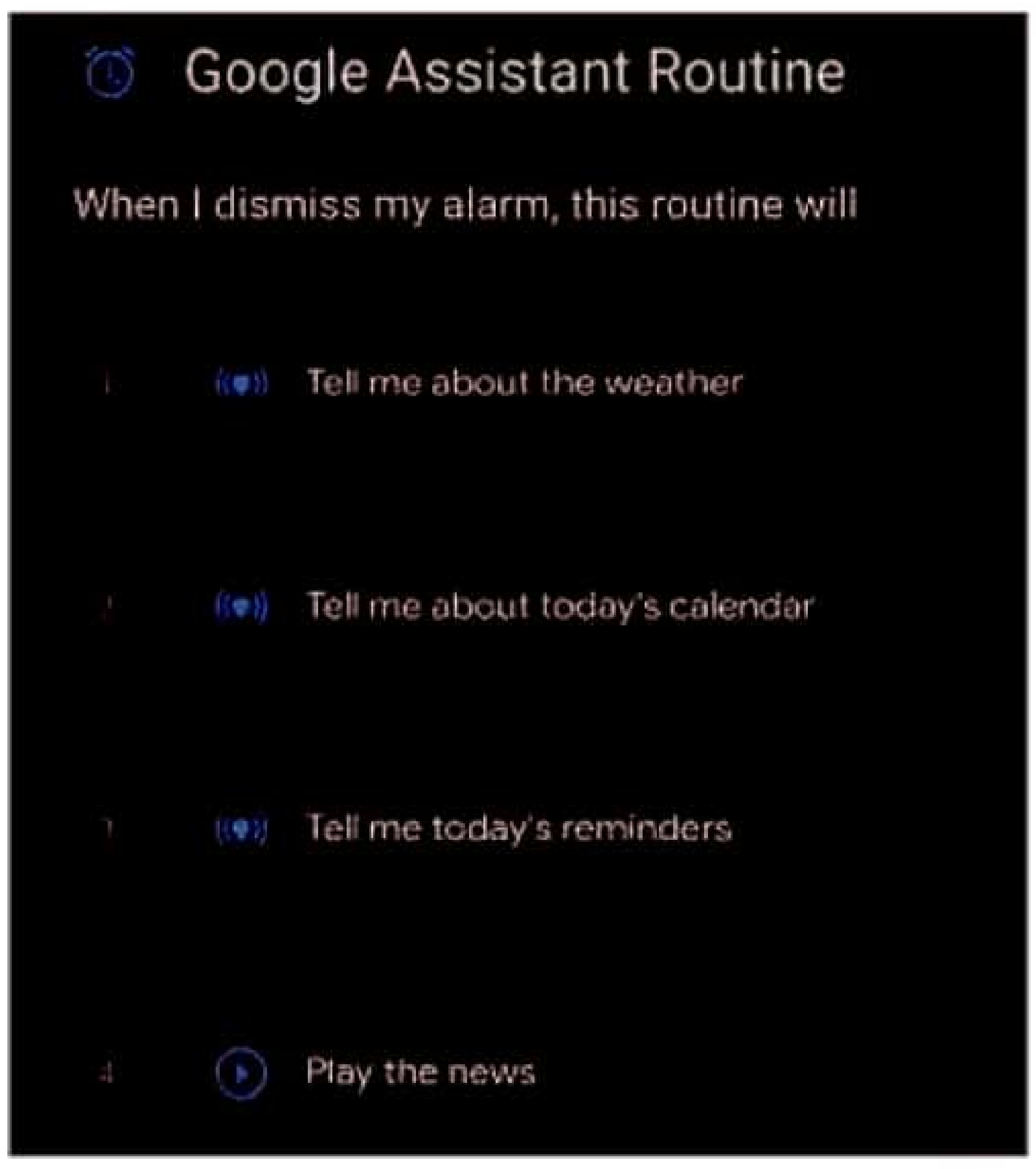
Phone and Tablet Tips

ANDROID

Start your day with a personalised morning briefing

You could wake up to a siren or a series of beeps, but wouldn't a personalised news report be much more useful? Whether it's a weather forecast, traffic on your commute, the latest news bulletin – or a mix of all three and more – you can tailor your morning briefing to your exact requirements.

Open the Android Clock app, tap Alarm on the bottom bar, then tap the '+' button to add a new alarm. Set the time you want the alarm to sound, then tap OK. Make sure you tap the box beside Repeat if you want the alarm to sound every day, then tap the days of the week you want to apply it to. Next, tap the '+' beside Google Assistant Routine.


Google Assistant Routine

When I dismiss my alarm, this routine will

1. Tell me about the weather
2. Tell me about today's calendar
3. Tell me today's reminders
4. Play the news

By default, Google includes four actions: a weather forecast, appointments in your calendar for that day, any reminders you've set for that day, and the latest new bulletin (see screenshot below left). Tap the pencil icon if you'd like to remove any of them, then tap the bin icon beside the ones you want to get rid of.

You'll see a row of suggested additional actions at the bottom of the screen, such as what happened on this day in history, adjusting the lights (for example, to turn on smart bulbs), and adjusting the thermostat if you have a smart thermostat. However, you can also add your own by tapping '+ Add action' and selecting from the list of options that appears. When you've built the perfect sequence, tap Save.

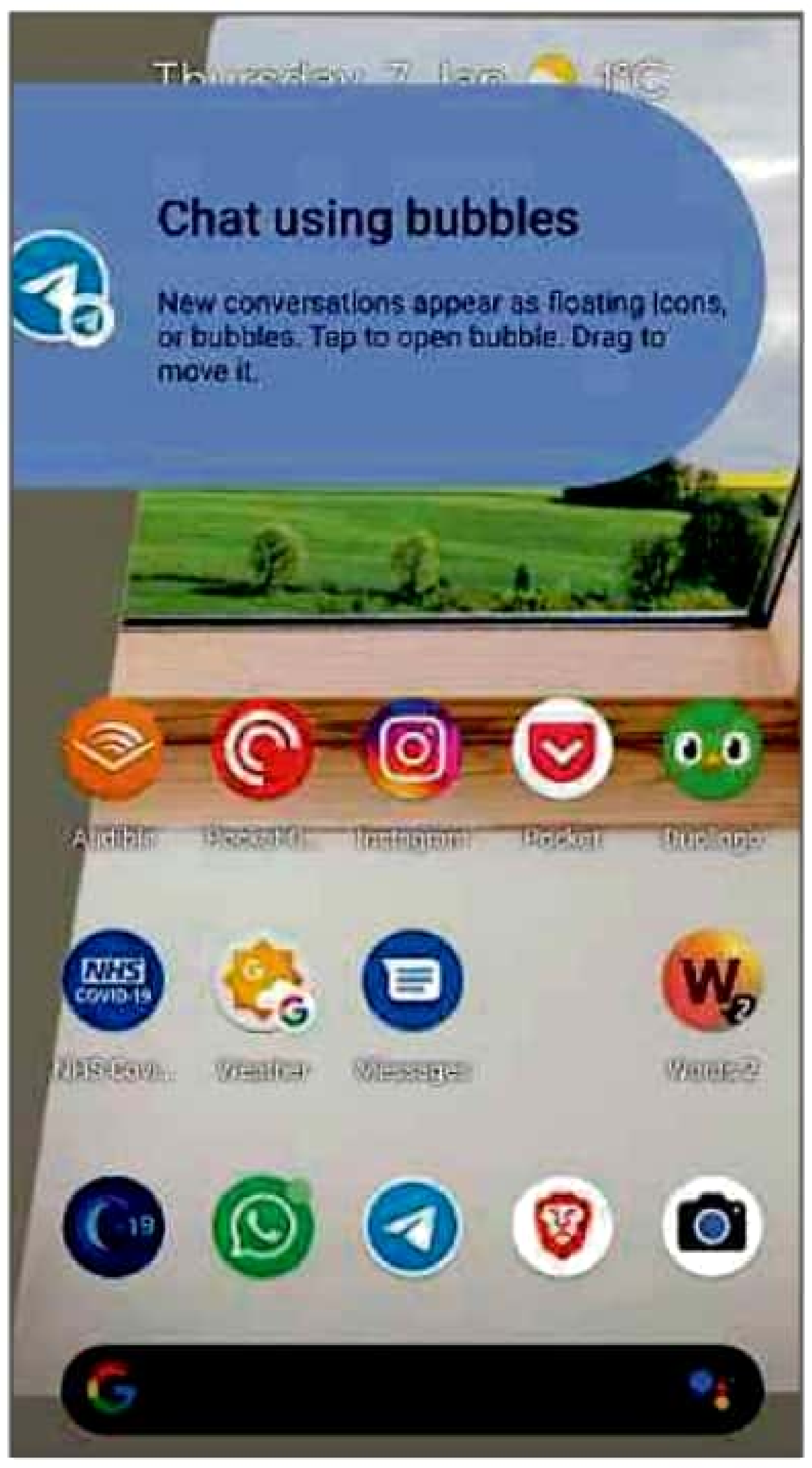
Your phone will still sound an alarm when you need to wake up but, as soon as you've turned it off, your personalised briefing routine will kick in.

ANDROID

Prioritise important messages

Many of us use our phones for text-based messaging more than we do for calls. That can lead to bulging inboxes and, because not everyone uses the same services, you'll often have to keep an eye on several apps to make sure you don't miss an important message. Fortunately, Android 11's Chat Bubbles feature (see screenshot left) makes it easy to keep tabs on the contacts and groups that matter most, however they choose to keep in touch.

Next time an important message arrives, swipe down from the top of the screen to open the notifications area and tap the bubble icon in the bottom right corner of the notification. This adds an icon to the left-hand side of the screen bearing the icon of the relevant messaging app. You can reposition it by dragging it around, so it shouldn't get in the way when it's floating on top of other apps. Now, whenever a new message is added to that thread the icon on the side of the screen will carry a notification badge so you know it's waiting for you. That way, you can keep tags on important conversations while ignoring everything else until you have more time to deal with them.


Chat using bubbles

New conversations appear as floating icons, or bubbles. Tap to open bubble. Drag to move it.

BEST NEW APPS What you should install this fortnight

OpenWeather

Free

iOS www.snipca.com/37087

Android www.snipca.com/37088

This weather app takes a scientific approach to presenting upcoming conditions, with hourly forecasts for the next two days and minute-by-minute temperature and rainfall updates for the next hour. It's packed with information, presented using smart, flat graphics, and includes official warnings, like snow and ice alerts.

Chelmsford District
-1°C

Footpath Route Planner

Free* (for five saved routes. From £1.42 per month for unlimited)

iOS www.snipca.com/37087

Android www.snipca.com/37084

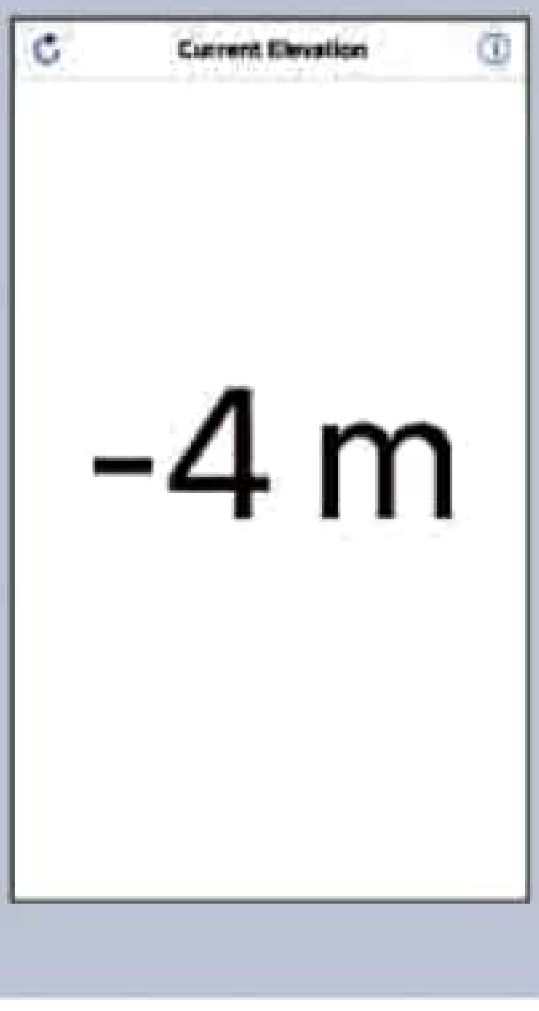
Tap the pen and draw a rough route on the on-screen map, and Footpath Route Planner will snap your line to real footpaths and roads on the underlying map. It's extremely quick, and much easier than manually plotting your route on paper or an onscreen street plan. You can save five routes in the free edition.

Altimetry

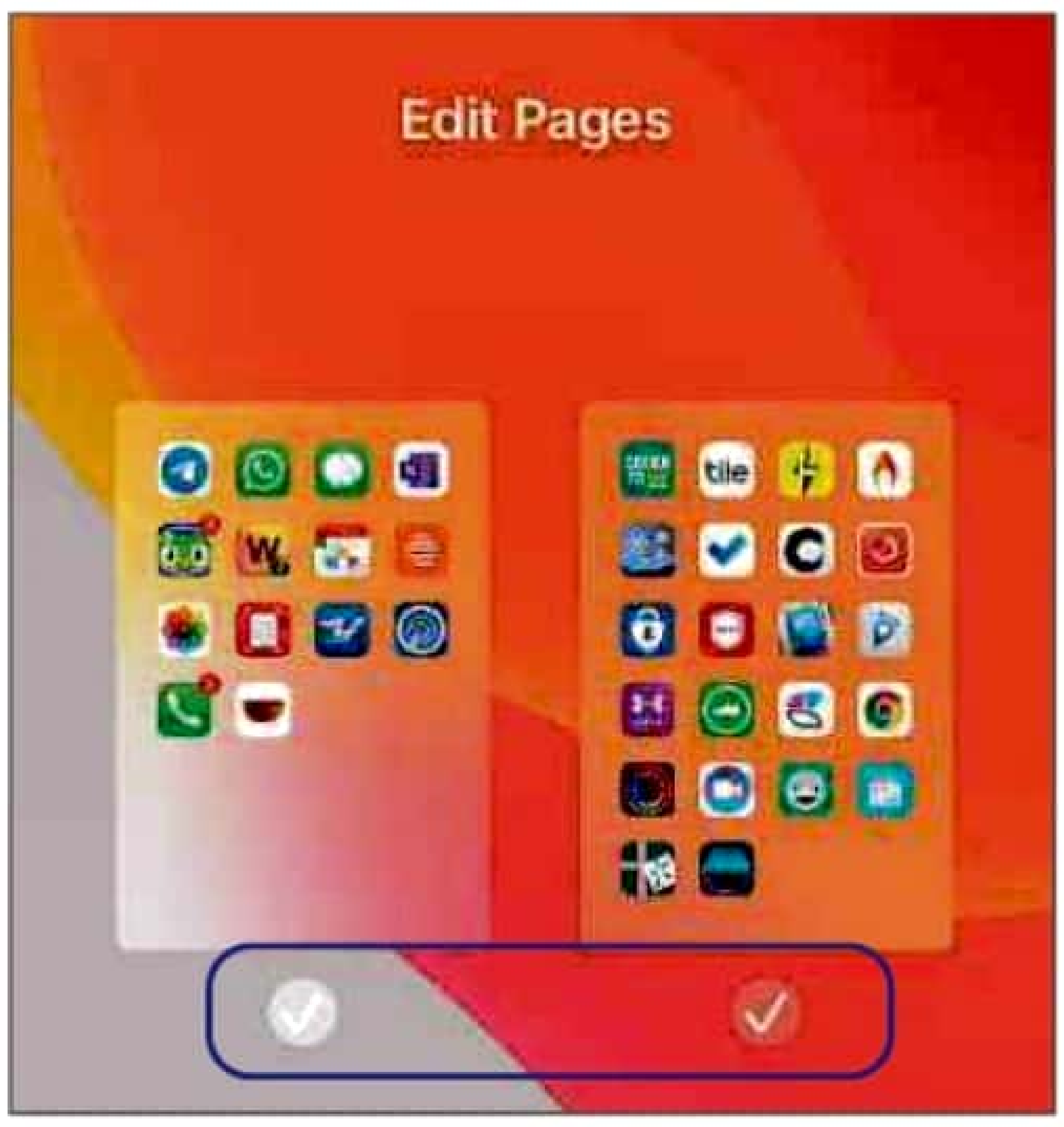
Free

iOS www.snipca.com/37086

Use your phone's built-in pressure sensor to get more accurate elevation readings. If you're a keen walker or cyclist, this app could give you a real sense of achievement when you see how far you've climbed. Tap 'View Raw Data' and you'll see information relating to atmosphere (barometric) pressure, such as humidity and temperature, helping you make better choices about when to go for a walk.



*Contains in-app purchases



iOS

Organise your home screens more quickly

Have you got too many app icons on your screen? Rather than manually moving them all around, iOS 14 lets you hide entire home-screen pages on your iPhone and bring them back into view when you next need to use them. This simple feature lets you set up different pages for different uses, like a weekday page for when you're at work, and a weekend one for when you're not and don't want to see all your work apps. You can then switch between them by hiding the one you don't want to use.

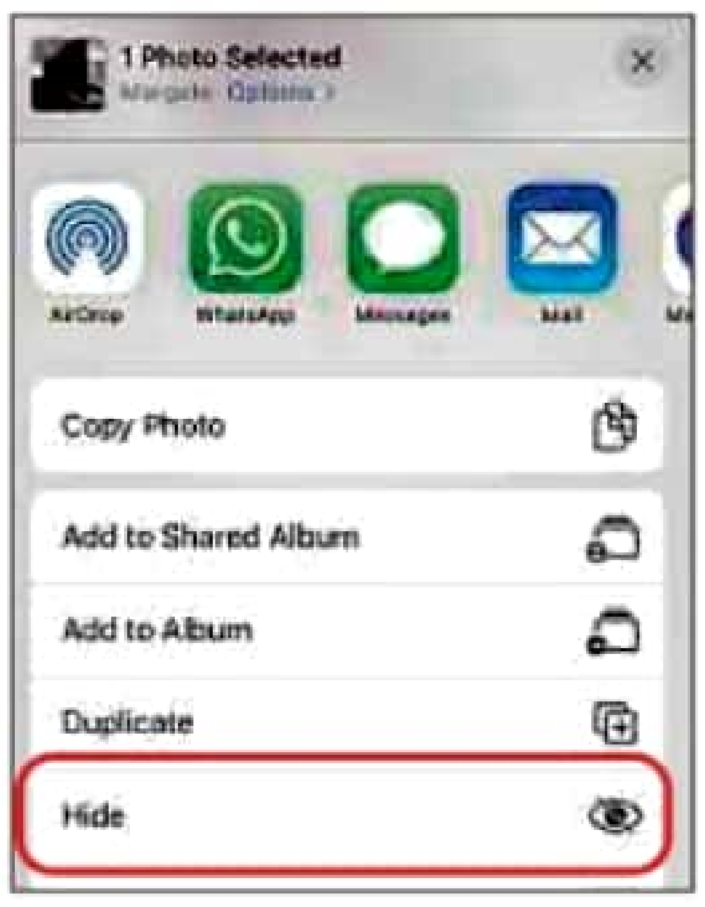
Start by organising your apps into logical pages. Long-press an app icon until they all start to shake, then drag them into your preferred locations. To move an app from one page of the home screen to another, drag its icon to the left of the screen (for the previous page) or the right (for the next) and after pausing for a second the screen will slide across. Let go of the icon to drop it in its new location. Next, tap the dots at the bottom of the screen, just above the Dock, and tap or clear the tick bubbles below each page. A page without a tick beneath it will be hidden, while one that is ticked will be shown (see screenshot above). Press the home button (or swipe up from the bottom edge on newer models) to exit editing mode and the app icons will stop shaking.

iOS

Hide private photos

You may have some photos that you don't want showing up if you hand your phone to someone else to look through. On the other hand, you may not want to delete them. This is where iOS's Hidden album comes in handy. Any photo added to that album won't appear on your phone, even though it remains on the device and is synced to iCloud Photos (if you use it).

To hide a photo, first open it, then tap the share icon on the left of the bottom toolbar. Scroll down and tap Hide (see screenshot right). The picture will be added to the Hidden folder, which you can find by tapping Albums on the bottom bar of the main Photos interface, then scrolling down to the Utilities section, where there's a 'Hidden' link. At this point, we'd recommend going a step further and hiding the Hidden album itself so that anyone who has access to your phone has to jump through a few extra hoops before they stumble on your hidden pictures. Open the Settings app and tap Photos, then turn off the switch beside Hidden Album. This will remove it from the list of albums in the Photos app.



BEST APPS FOR... Colourising photos

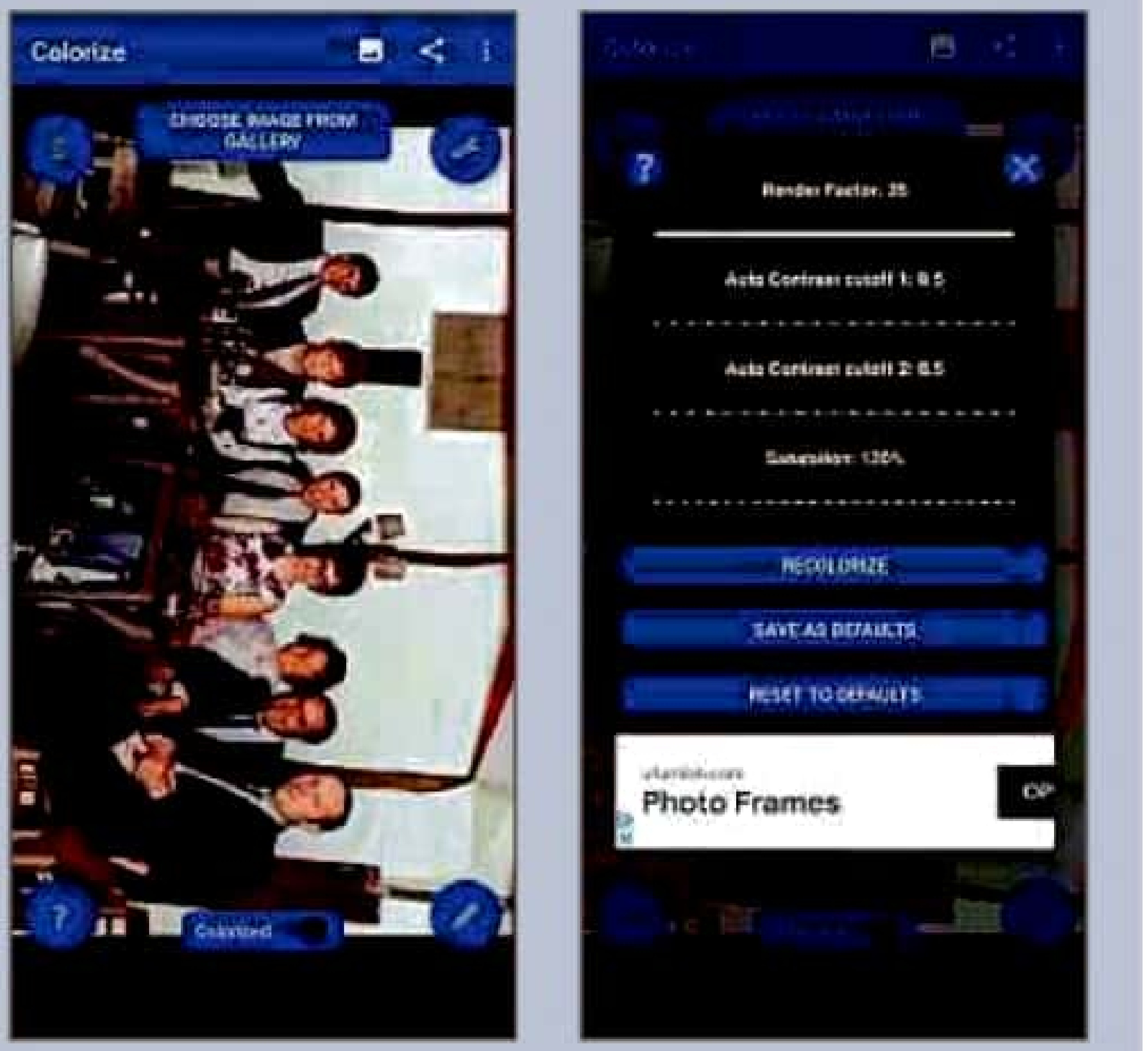
Colorize Images

Free*

Android www.snipca.com/37090

Upload a black-and-white image from your photo library and this app will apply colour. We found the default results to be a little over-saturated for our tastes, but you can tweak these using a series of sliders until you get something you're happy with. You can perform 10 colourisations before you need to pay. This starts at 89p for eight hours, or £1.59 for a month.

Best For Quickly tweaking photos



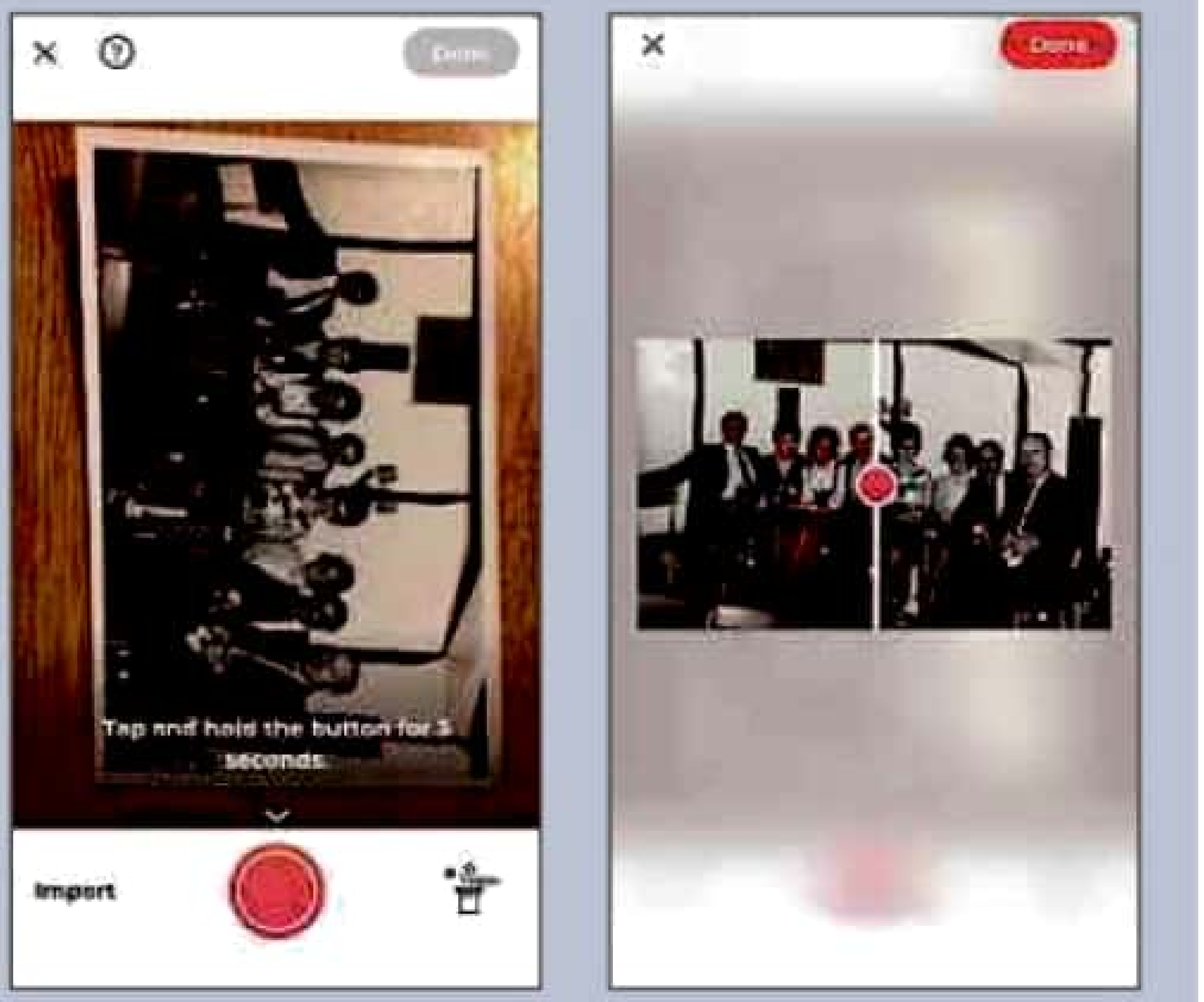
Colorise

Free*

iOS www.snipca.com/37089

Take a picture of a mono photo and this app will analyse its contents and colour them. The results are very realistic, with good skin tones and balanced colours. The free app lets you save the results in 'good' quality, resulting in a picture that could be printed roughly 50 per cent larger than our original at 300dpi in our tests, but you can go further with a paid-for upgrade.

Best For Colourising images on an iPhone



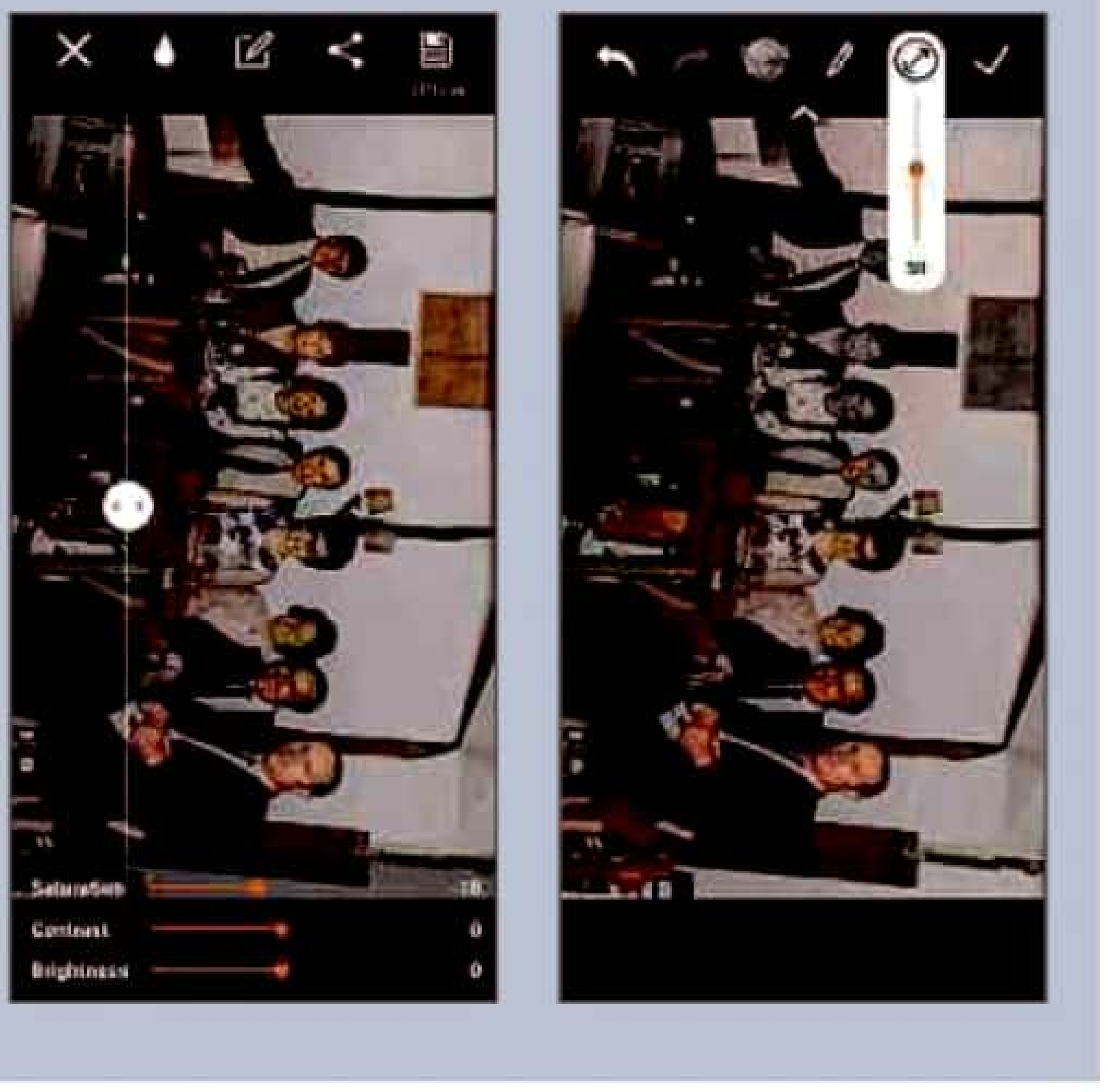
Colorize it

Free

Android www.snipca.com/37092

Colorize it puts its controls front and centre, and gives real-time preview as you change the strength of the saturation, contrast and brightness in your coloured image. You can also drag a divider across the image to see the effect it's had and, rather neatly, highlight areas that should remain mono. Images are watermarked, but you can remove this by watching a video or upgrading (starting from 89p).

Best For Artistic colourisers

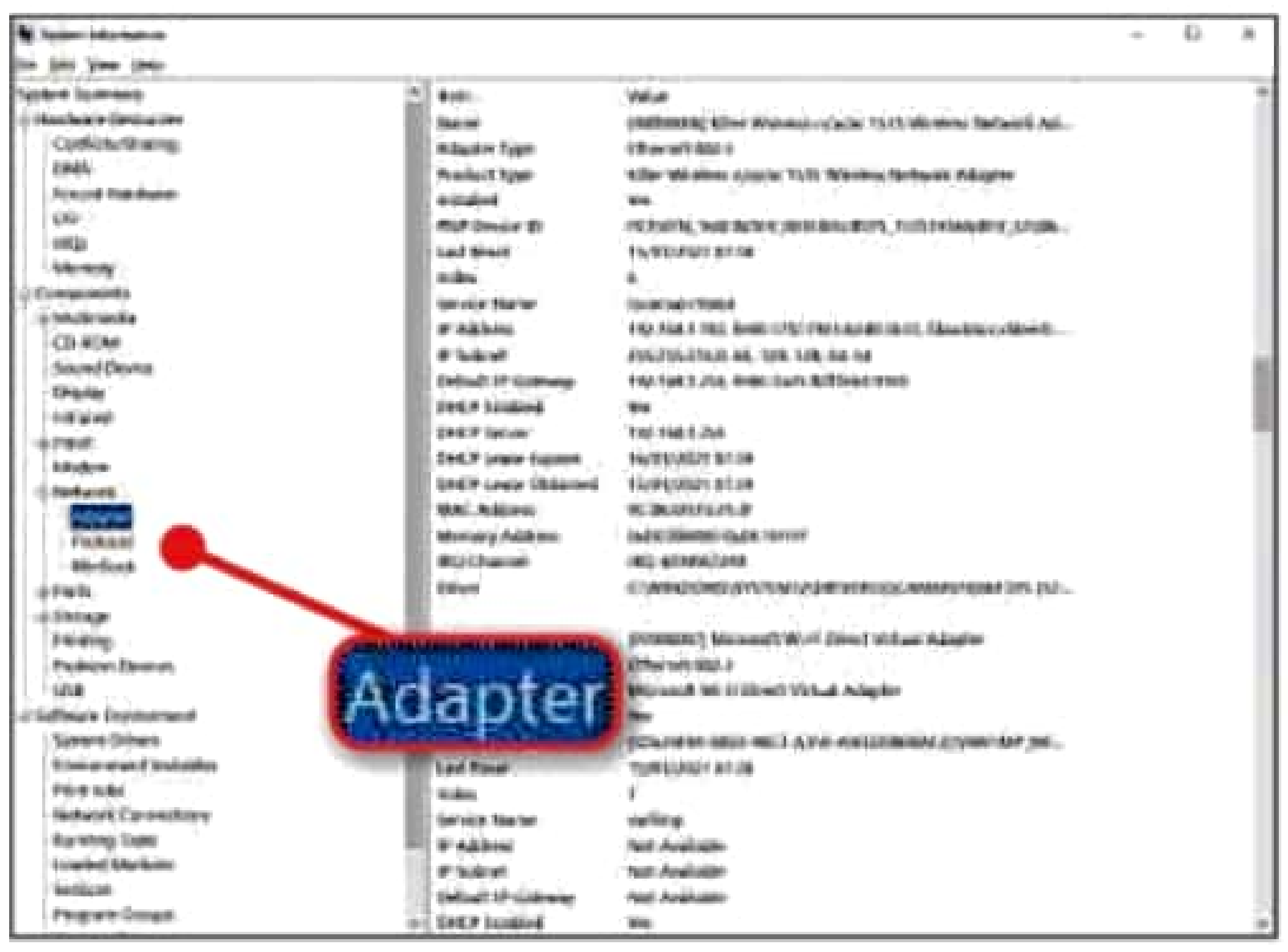


*Contains in-app purchases

WINDOWS 7, 8.1 & 10

Quickly view all system information

What's the make and model of your motherboard? How much memory do you have installed? What processor is inside your PC? You can find the answer to these questions and more in the System Info app built into Windows. To open it, click Start, type msinfo32.exe, then press Enter. The default 'System Summary' section provides a detailed overview of your PC and its resources, but you can dig even deeper using the categories on the left. For example, open the Components category and select Network, then Adapter (see screenshot below) and you'll find everything you ever wanted to know (and lots more besides) about the wired and wireless network adapters inside your PC.



WINDOWS 10

Find out when the last Feature Update was installed on your computer

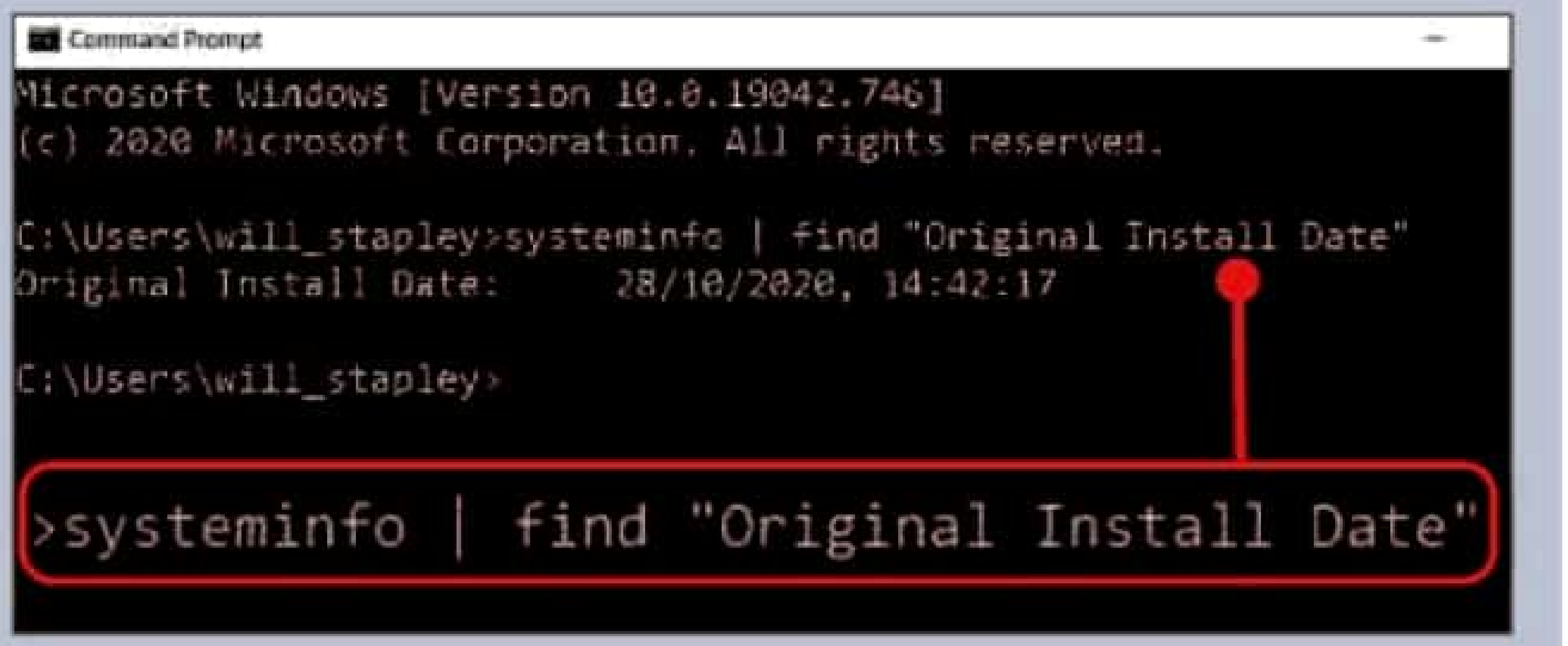
Microsoft releases Feature Updates for Windows twice a year (the next is due in the spring), with each bringing a selection of new features. However, as we explain on page 60, Microsoft also has a habit of removing tools with each Feature Update. Worse still, you may find an update causes problems with your PC – particularly on older computers.

If you find your PC isn't behaving properly and you suspect a Feature Update might be the culprit, you can find out the date the update was installed. Then, if your PC started playing up on the same day, you can be reasonably sure the update is to blame.

Click the Start button, type about your PC, then press Enter. In the window that appears, scroll to the 'Windows specifications' section. Next to Version, you'll see which version of Windows is installed on your PC (the latest is named 20H2, released last October), while 'Installed on' tells you the date it was installed.

Using a Command Prompt trick, you can go even further and find out the precise time Windows installed the update. To do this, open Command Prompt (click Start, type cmd and press Enter). Next, type systeminfo | find "Original Install Date" (see screenshot). On most keyboards, you can type a pipe symbol ('|') by pressing Ctrl+\, but you can also copy the command from our Pastebin account at www.snipca.com/37128. After a short delay, you'll see the date and time the last Feature Update installed next to Original Install Date.

If the date confirms your suspicions that the update is the cause of your problems, and it installed in the past 10 days, you can revert to the old version of Windows. Go to Settings, 'Update & Security', Recovery, then click 'Get started' under 'Go back to the previous version of Windows 10'.



```
Microsoft Windows [Version 10.0.19042.746]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\will_stapley>systeminfo | find "Original Install Date"
Original Install Date:     28/10/2020, 14:42:17

C:\Users\will_stapley>
```

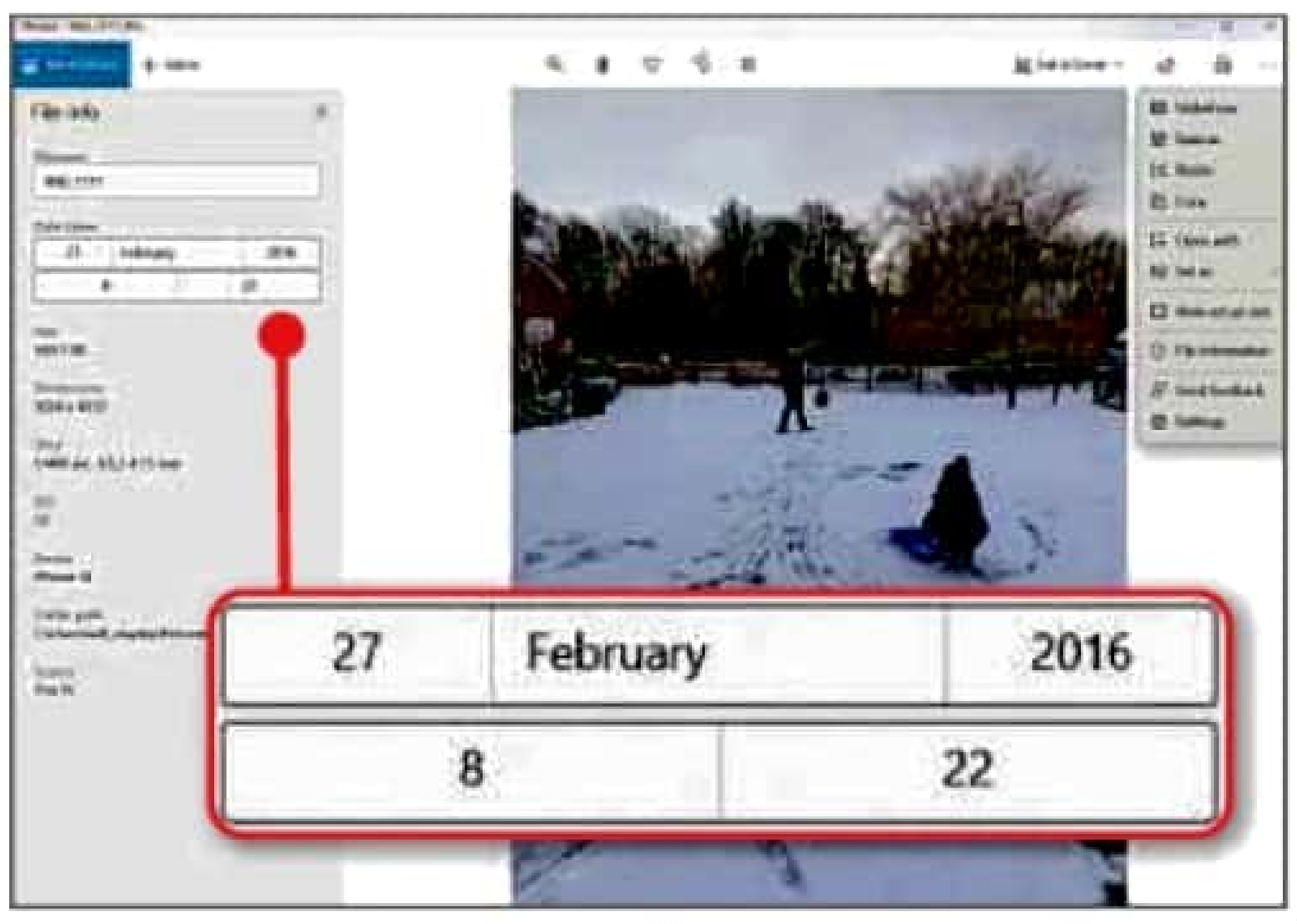
```
>systeminfo | find "Original Install Date"
```

WINDOWS 10

Change the date of photos

When you take a photo on your digital camera, the timestamp applied to it will reflect the date and time of the camera's built-in clock. If this clock is set incorrectly, the photos you take with it will also have the wrong date and time. There are lots of ways to fix this (such as using the powerful ExifTool – see Issue 595, page 20). But if you want to change the time only on a couple of photos, it's easier to use the Photos app that's built into Windows.

Press the Windows key+E to open File Explorer, then navigate to the folder containing the photo you want to change. Double-click the photo to open it in the Photos app (if you've set a different app as the default for viewing photos, right-click the photo, then select 'Open with' followed by Photos). Next, click the three dots (top-right), then 'File information'. You can now change the time and date the photo was taken on the left side of the window (see screenshot below left).



27 February 2016

8 22

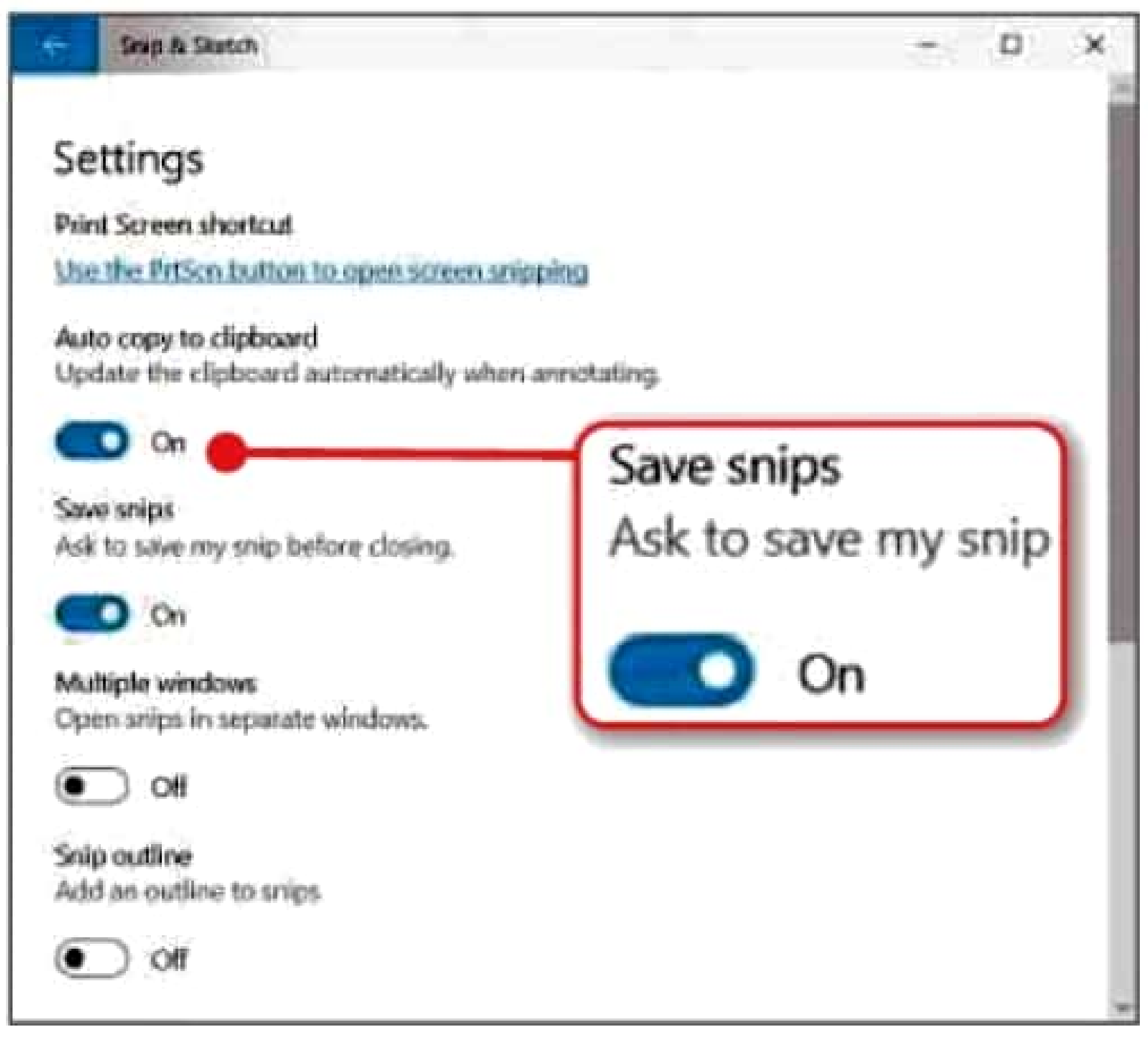
WINDOWS 10

Get reminded to save screenshots with Snip & Sketch

The Snip & Sketch tool in Windows is great for taking a quick screenshot. However, by default it simply copies your screenshot to the clipboard and won't prompt you to save it when you close the tool.

To avoid accidentally losing your screenshots in future, open the tool (click Start, type snip & sketch, then press Enter) and click the three dots, top-right, followed by Settings.

From here, click the slider button under 'Save snips' so that it changes to On (see screenshot above). From now on, Snip & Sketch will remind you to save your screenshot before it closes.



Settings

Print Screen shortcut
Use the PrtScn button to open screen snipping

Auto copy to clipboard
Update the clipboard automatically when annotating
On

Save snips
Ask to save my snip before closing
On

Multiple windows
Open snips in separate windows
Off

Snip outline
Add an outline to snips
Off

Save snips
Ask to save my snip
On

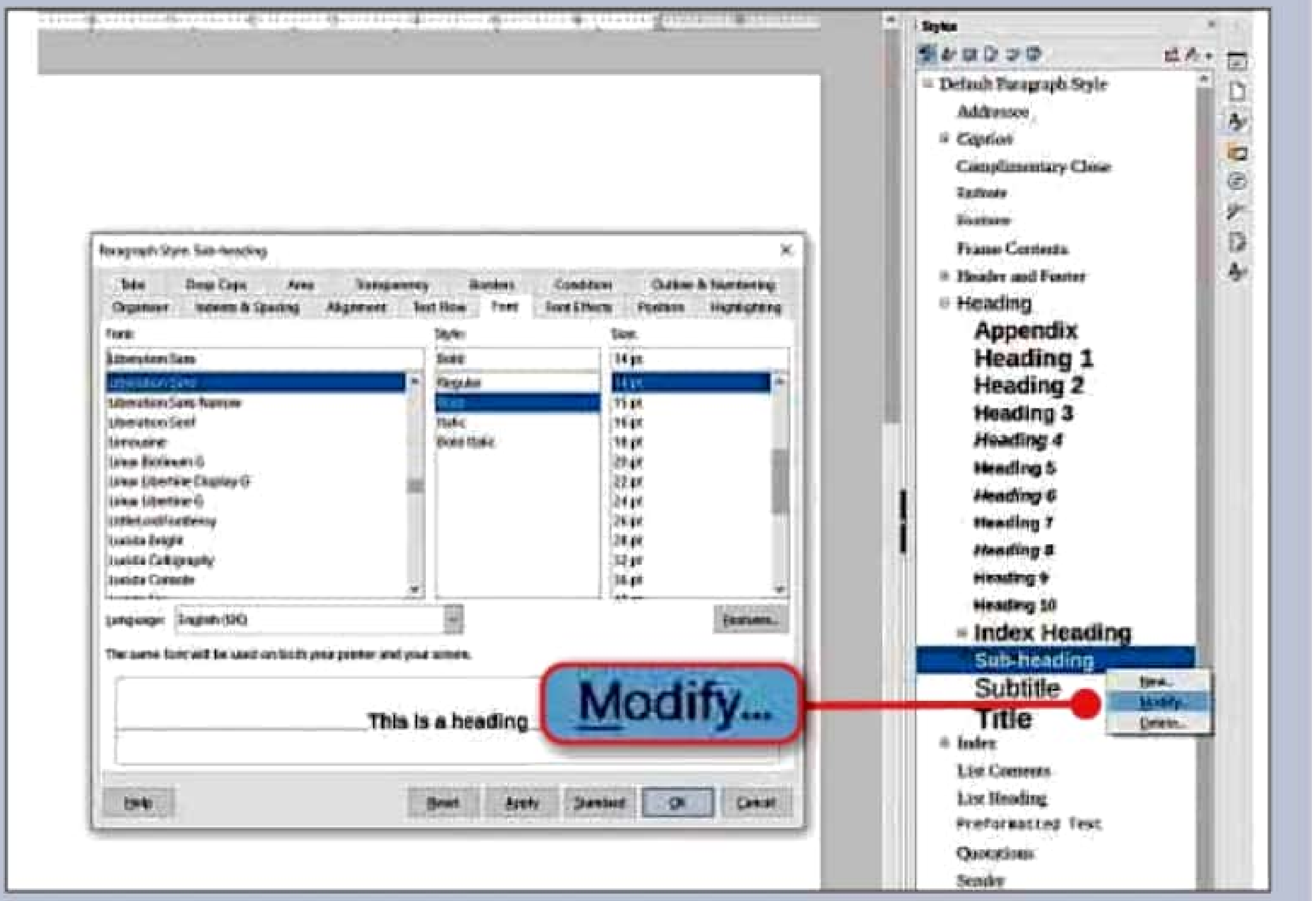
LIBREOFFICE WRITER

Define font styles you can quickly access

When writing a document in LibreOffice Writer, you may end up using a several different font sizes and styles (such as for headings, sub-headings and picture captions). Having to repeat applying a style from scratch each time can soon become a pain. Save yourself the hassle by adding the styling to the Writer's Style list, letting you quickly access it in future.

If the Styles sidebar in Writer isn't already visible on the right-hand side of the window, press F11 to reveal it. Next, highlight the text that uses the font style you want to save, then drag it directly into the Styles sidebar (don't worry if you're not yet sure which heading to put it under – you can drag it to a different heading later if needed). When prompted, give your style a name, then click OK. When you next want to use the style, simply select it in the Styles sidebar. You can also apply your style to existing text – just highlight the text before selecting your style in the sidebar.

To further customise your style, right-click it in the sidebar, then select 'Modify...' (see screenshot). You can now change the font type and size, along with other formatting such as indents, borders, alignment and more. To remove a style from the list, right-click it and select 'Delete...'.


Paragraph Style: Sub-heading
This is a heading
Modify...
Heading
Appendix
Heading 1
Heading 2
Heading 3
Heading 4
Index Heading
Sub-heading
Subtitle
Title

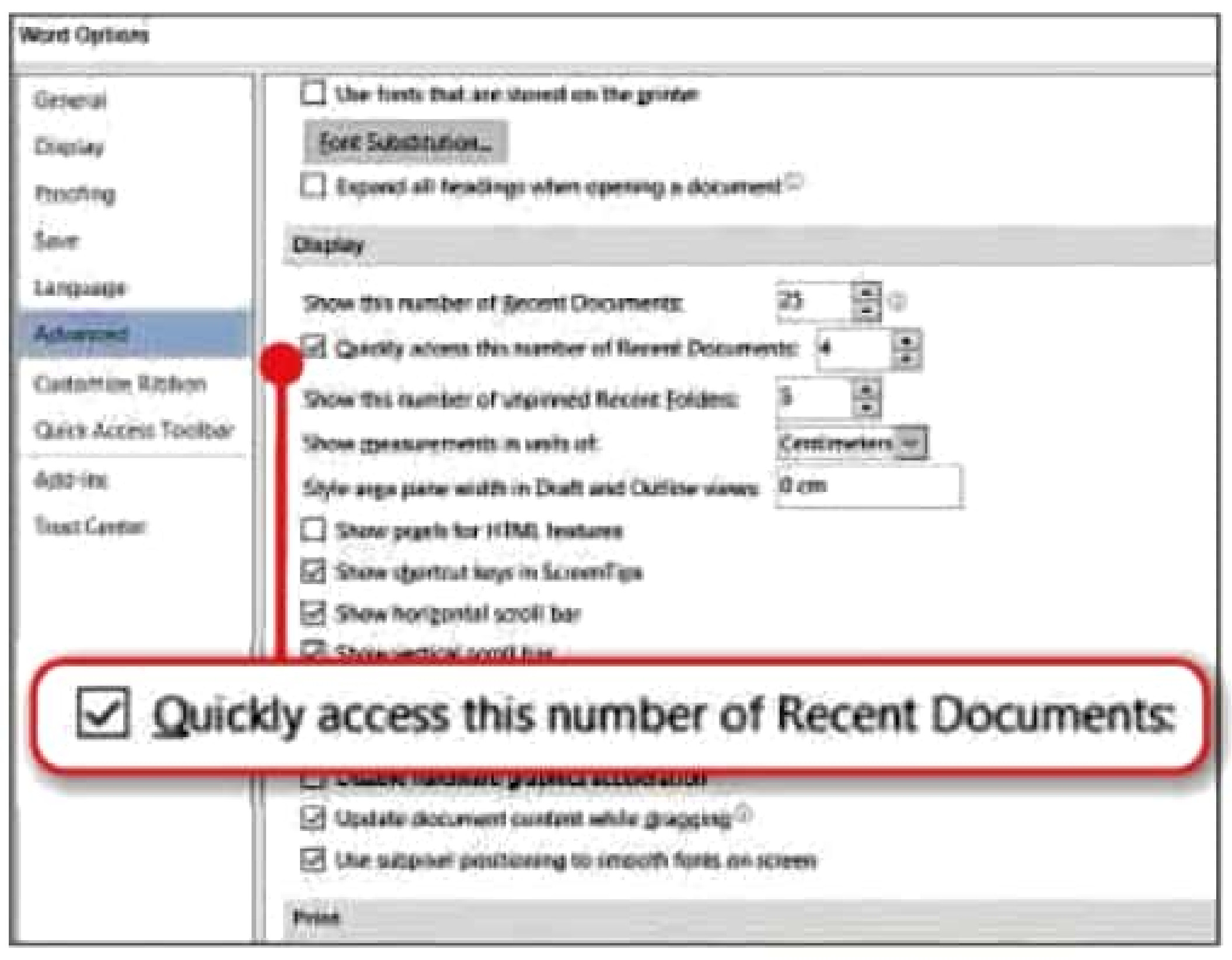
MICROSOFT WORD

Access documents quickly

When you click File then Open in Word, you'll see a list of your most recently opened documents. However, there is an even faster way to open them, but you have to tweak a setting first to use the option.

Click File, Options, then select the Advanced section. Scroll down on the right of the window to the Display section, then tick the 'Quickly access this number of Recent Documents' box (see screenshot below). By default, Word will display your four most recent documents, but you can increase this to 25 if you want. Click OK to save your changes.

When you next click File, you'll notice that your recent documents are listed immediately below the usual File options (Open, Save and so on). To speed things up even more, you can access these documents by simply pressing the number keys (1 for the first document, 2 for the second and so on).

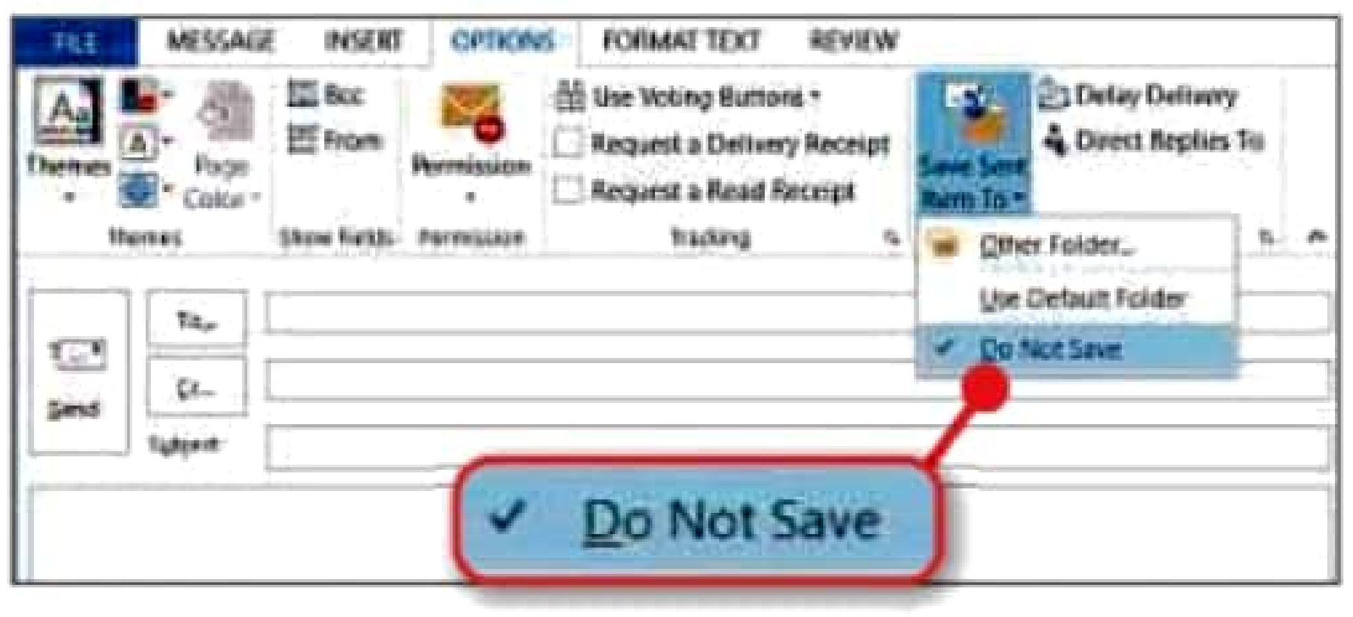

Word Options
General
Display
Proofing
Save
Language
Advanced
Customize Ribbon
Quick Access Toolbar
Add-ins
Trust Center
Display
Show this number of Recent Documents: 25
☑ Quickly access this number of Recent Documents: 4
☑ Quickly access this number of Recent Documents
Print

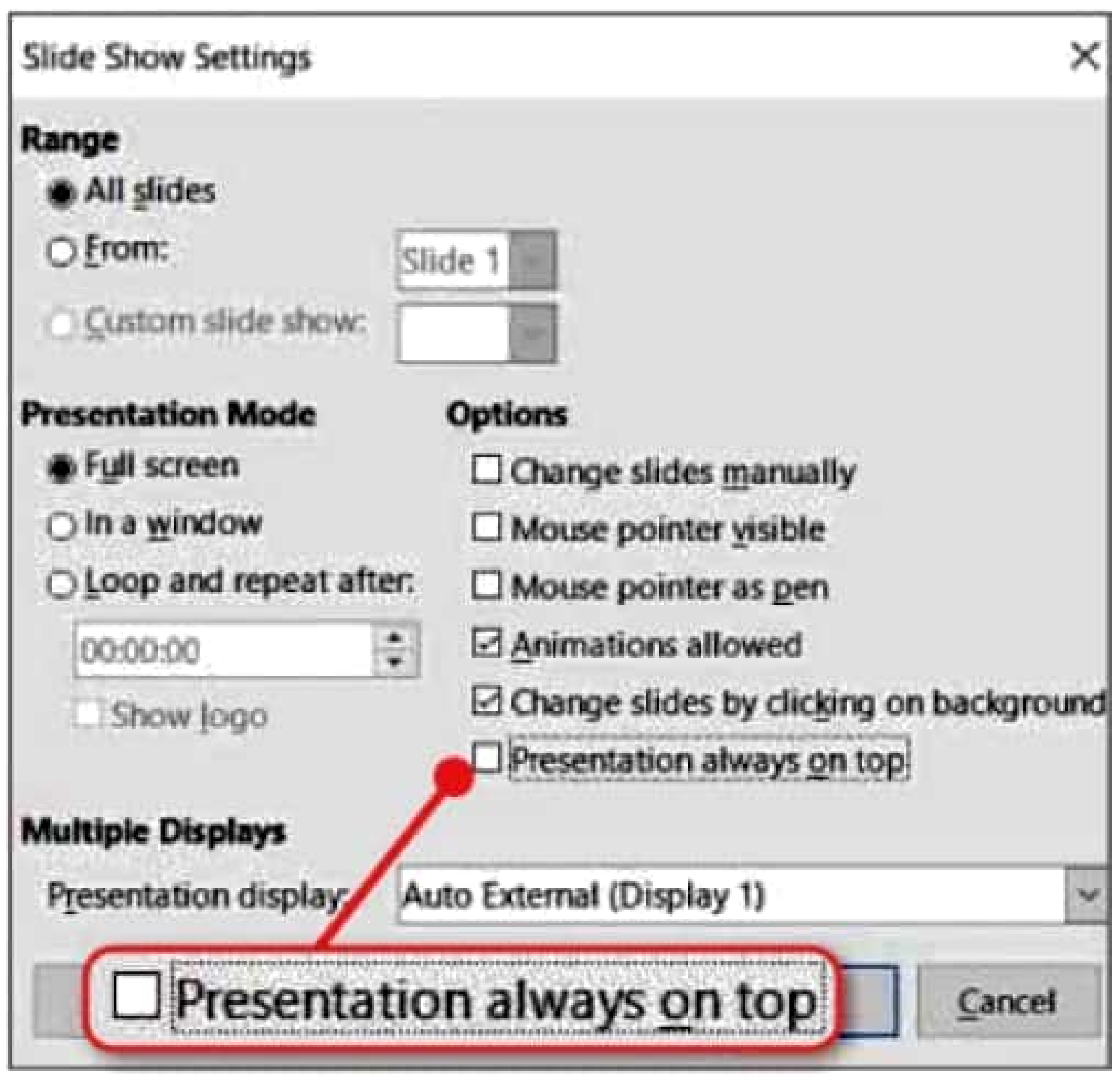
MICROSOFT OUTLOOK

Stop sensitive emails saving to your Sent Items folder

By default, Outlook saves any email you send in its Sent Items folder. For the most part this is useful – it lets you keep track of what you've sent to who, and helps you follow up on any emails you haven't had a response to. However, sometimes you may not want a copy of your email saved in this way – for example, when you email financial information to someone.

To avoid having to go through the Sent Items folder to delete it, select the Options tab when writing the email, click 'Save item sent to', then tick Do Not Save (see screenshot below). This change only applies to the email you're currently writing, but if you prefer you can set Outlook to *never* save emails to the Sent Items folder. To do this, click File, Options, then Mail. Now scroll down to the 'Save messages' section and untick 'Save copies of email in the Sent Items folder'.


FILE
MESSAGE
INSERT
OPTIONS
FORMAT TEXT
REVIEW
Use Voting Buttons
Request a Delivery Receipt
Request a Read Receipt
Save Sent Item To
Delay Delivery
Direct Replies To
Other Folder...
Use Default Folder
Do Not Save
✓ Do Not Save



Slide Show Settings

Range
● All slides
○ From: Slide 1
○ Custom slide show:

Presentation Mode
● Full screen
○ In a window
○ Loop and repeat after: 00:00:00
☐ Show logo

Options
☐ Change slides manually
☐ Mouse pointer visible
☐ Mouse pointer as pen
☑ Animations allowed
☑ Change slides by clicking on background
☐ Presentation always on top

Multiple Displays
Presentation display: Auto External (Display 1)

☐ Presentation always on top
Cancel

LIBREOFFICE IMPRESS

See other windows when presenting

When presenting using LibreOffice Impress, you may want to keep an eye on other windows you have open, such as a website in your browser. However, by default Impress is set to appear on top of all other windows when presenting. To stop this happening, open the Slide Show menu, then click 'Slide Show Settings...'. In the window that opens, untick 'Presentation always on top' (see screenshot above). You'll now be able to position other windows on top of your presentation window. If you're outputting the presentation to a second screen or projector, this will continue to show only your presentation slides, and not any other windows you have open.

In The Club

Run a club or society? Here's how your tech can make it easier

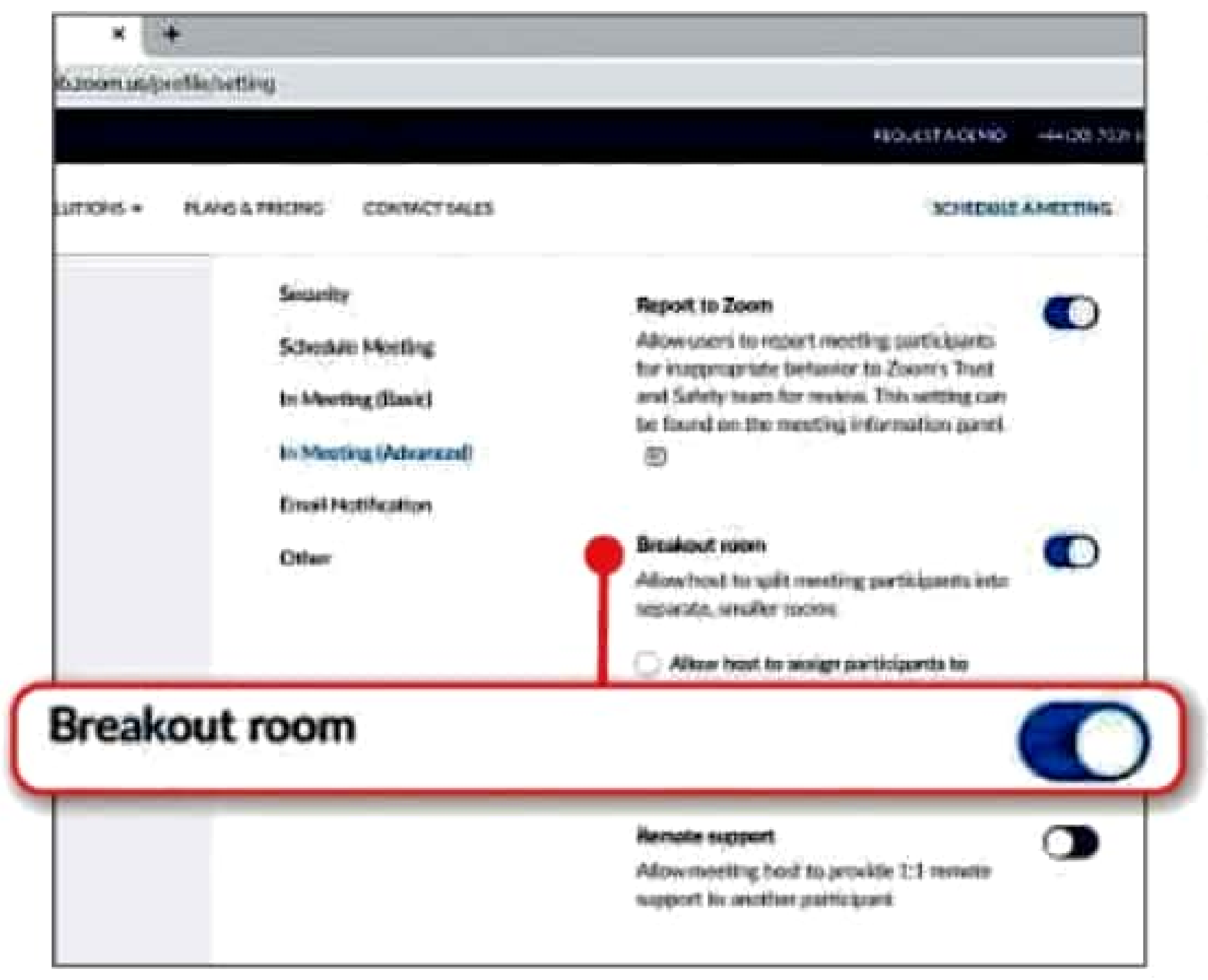
Use breakout rooms in Zoom calls

There are plenty of free video-chat tools that let you speak to your club's members as a group (Skype recently increased the maximum limit in a group call to 100 – see Issue 595, page 48). However, actually managing a call with more than 10 or so people can be tricky, and good ideas can get lost when everyone attempts to talk over one another while also shouting "You're on mute!" to those mouthing words silently.

Thanks to the breakout-room feature in Zoom, you can split call participants into smaller, more manageable groups, with each one effectively operating as a separate call. It works really well when you want smaller groups to discuss ideas then present these back to everyone else.

Alternatively, you may use this feature as part of a virtual event showcasing your club to prospective new members, letting them dip in and out of rooms depending on their particular interests.

Zoom offers breakout rooms as part of its free service, but the feature is disabled by default, so you need to turn it on via the Zoom website at www.zoom.us (note that you can't change this setting within the Zoom app on your PC or phone). Click 'Sign In' (top right), log into your account, then click Settings in the left-hand sidebar. Next, select 'In Meeting (Advanced)', then click the slider button next to 'Breakout room' so that it turns blue (see screenshot below).



Report to Zoom
Allow users to report meeting participants for inappropriate behavior to Zoom's Trust and Safety team for review. This setting can be found on the meeting information panel.

Breakout room
Allow host to split meeting participants into separate, smaller rooms

☐ Allow host to assign participants to

Breakout room

Remote support
Allow meeting host to provide 1:1 remote support to another participant

Zoom's Breakout Rooms feature is disabled by default, so you need to turn it on via the website

Next, open the Zoom app on your PC or laptop (if you haven't already downloaded it, get it from www.snipca.com/37044). If you have a phone and tablet, it's worth creating a test meeting in which you can practice using breakout rooms. All you need to do is sign into your account on your various devices, then click New Meeting on each (this will sign you into the same meeting on each).

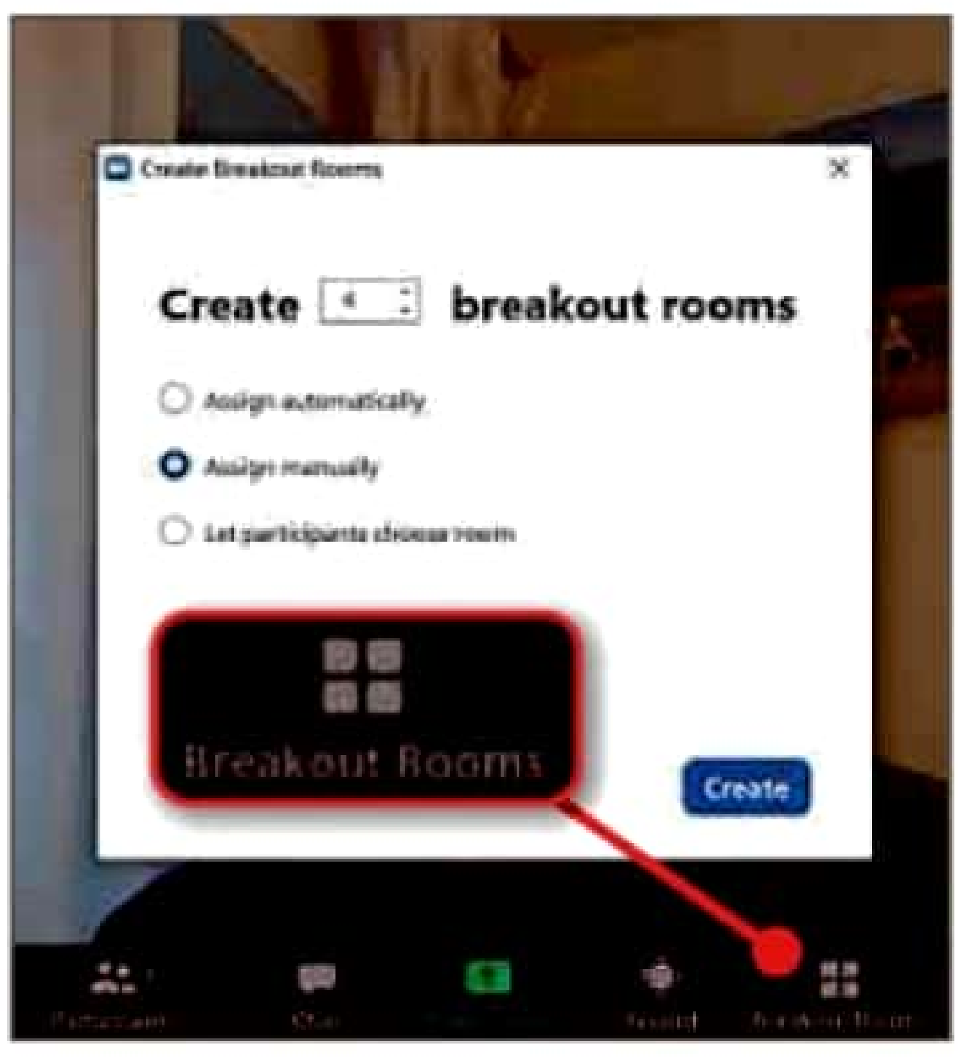
Create your breakout rooms

Once you're in the meeting, you'll notice a new Breakout Rooms button at the bottom of the window (see screenshot below – if you can't see it, try making the Zoom window bigger). Click this button, select how many rooms you want (you can create up to 50), then decide how you want the people in your call to use them.

If you want to control who goes into which room, select 'Assign manually'. Select 'Let participants choose room' and people will be able to choose themselves which room to enter – this is useful if you're running a series of talks and want to let people choose which to join in with.

Alternatively, if you want to kick things off by ensuring each room has an equal number of people (or thereabouts), select 'Assign automatically' and Zoom will place people in rooms randomly.

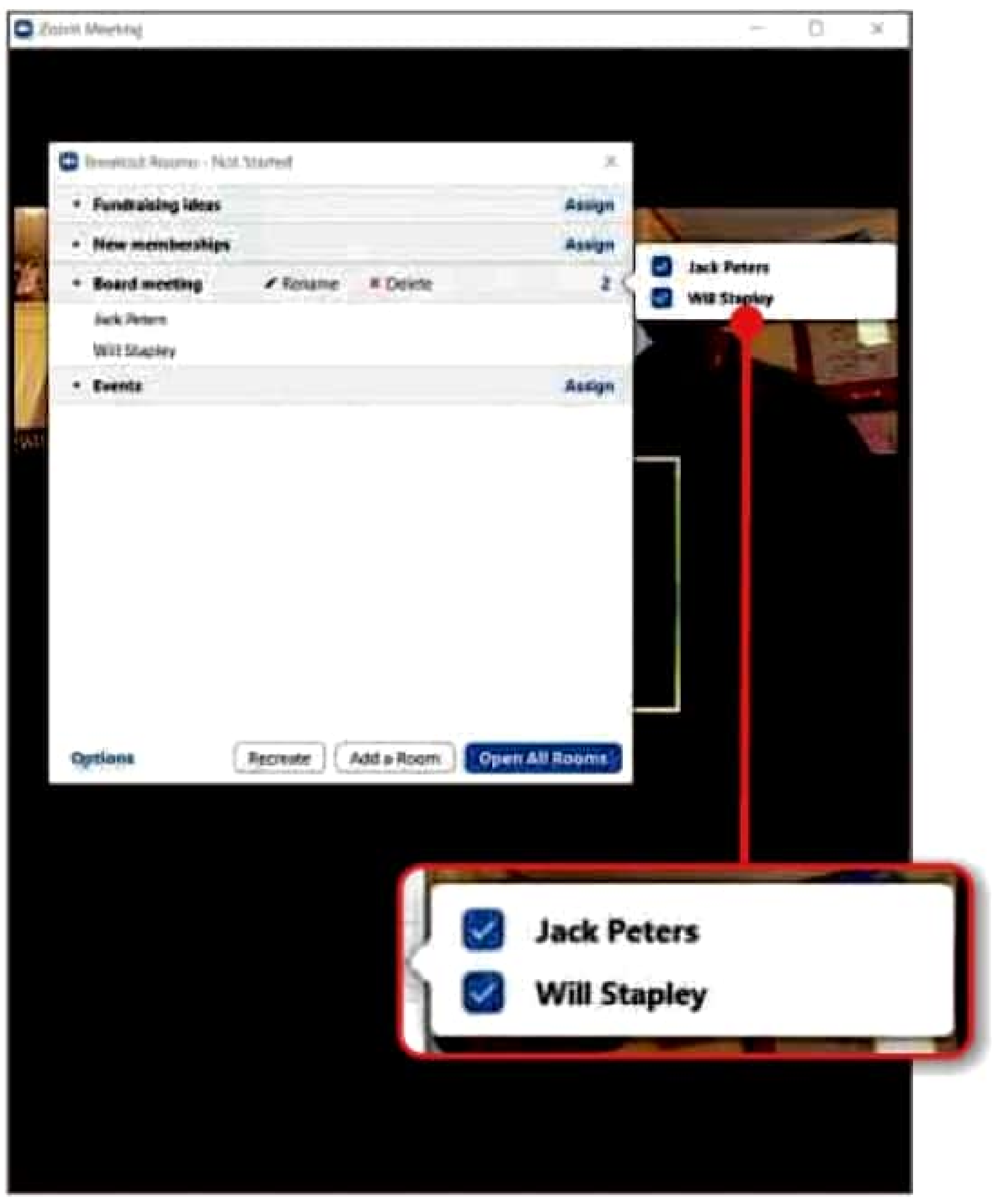
You can now give your rooms appropriate names by hovering over the relevant room and selecting Rename. To tweak your rooms further, click Options. Here you can change settings including whether to allow people to switch rooms, let people return to the main session at any time and set rooms to close after a set period of time. Click 'Create' when you've made your choices.



Create 4 breakout rooms

○ Assign automatically
● Assign manually
○ Let participants choose room

Click the Breakout Rooms button to start creating your rooms



- Fundraising ideas
- New memberships
- Board meeting 2
  - Jack Peters
  - Will Stapley
- Events

☑ Jack Peters
☑ Will Stapley

Once you've created your breakout rooms, you can put people in them

Open your breakout rooms

To start the breakout rooms, click Open All Rooms. If you opted to let participants choose which room they enter, they can do so by clicking the Breakout Rooms button, then selecting a room. Alternatively, you can click Assign next to a room, then select the people you want to put in it (see screenshot above).

As the meeting's host, you can broadcast a message to everyone regardless of which room they're in. To do this, click Breakout Rooms, then 'Broadcast Message to All'. You can also recall everyone to the main Zoom session by selecting Close All Rooms.

If you're using the free version of Zoom your meetings will be limited to 40 minutes. You can restart them immediately (and participants can sign back in using the same meeting link), but you will also need to recreate your rooms. Upgrading to the Pro version (£120 per year) extends meetings to a maximum of 30 hours and doubles the maximum number of participants to 100.

Next issue: Share club info in a Google Drive folder

What's All the **Fuss About...**

One Outlook

Microsoft wants to build one inbox to rule them all

What is it?

An attempt by Microsoft to create just a single version of Outlook that works online and on your desktop, replacing all the other confusing email options that currently exist in Windows.

Such as?

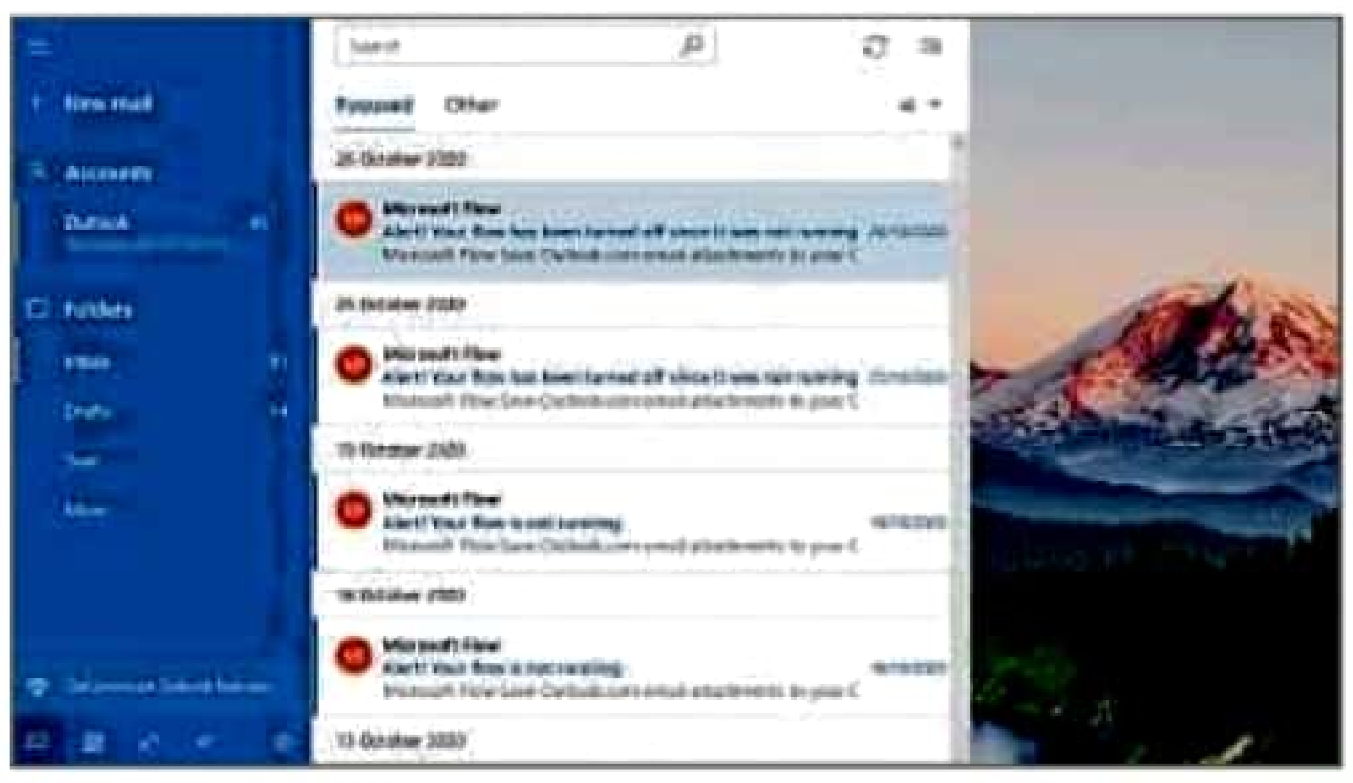
Well, for starters there's the Mail app that comes with Windows 10, having debuted in Windows 8. It's free to use, but doesn't have as many features as either the online or desktop versions of Outlook.

What does it lack?

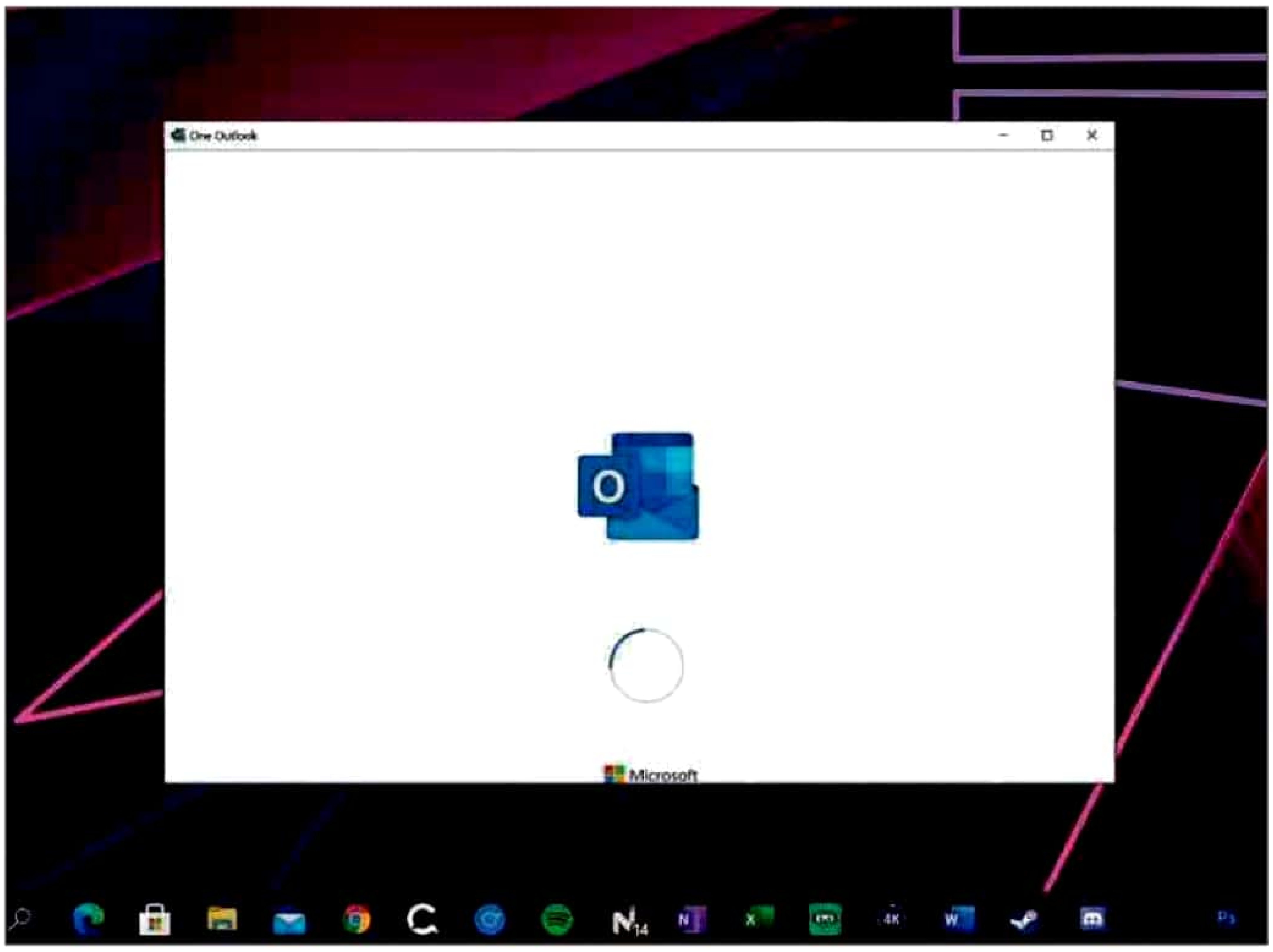
It can't send emails as plain text, for example, nor place them in categories. It also lacks Outlook's Ignore option, which automatically sends future emails in a chosen conversation to your Deleted Items folder (as Microsoft explains: www.snipca.com/37059). Microsoft once thought that the Mail app – and its sister Calendar app – represented the future of email. They even toyed with the idea of changing its name to Outlook, as if things weren't baffling enough already.

So why has it given up on Mail?

It goes back to the demise of Windows Phone. When Windows 8 launched in 2012, Microsoft hoped that developers would build 'universal' apps to work across all types of device, from traditional desktop PCs to touchscreen phones and laptops. It thought its own apps, like Mail, would lead the way. But that dream died when Windows Phone failed to compete with Apple's iOS and Google Android. The public shunned Windows Phone, so developers did also. Microsoft finally killed it in 2019. Two years on and Mail now feels like a tool that has outstayed its welcome.



The outlook isn't good for Microsoft's Mail app



So it's definitely being axed?

Almost certainly. The website Windows Central claims it has spoken to Microsoft staff working on the project, who say the aim is to build one supreme version of Outlook that has the same features whether you're online or offline, and no matter which type of device you use (PC, Mac, laptop, phone or tablet). As well as replacing Mail, it'll mean the end of the many different versions of Outlook.

How many are there?

Six we think. There's Outlook you can download to your Windows computer (that's one), and to your Apple Mac (two). Both require a subscription to Microsoft 365 (formerly Office 365 – starting at £5.99 a month or £59.99 a year), as does 'Outlook on the web' (three), which gives you access to your inbox online on any computer.

Microsoft also makes Outlook apps for Android and iOS devices (four and five – download from www.snipca.com/37062), plus the free Outlook.com (which makes it six), available at https://outlook.com and previously known as Hotmail.com and Live.com. You can use Outlook.com if your email address ends in @outlook.com, @hotmail.com, @msn.com, or @live.com. Add the Mail app to this list, and Microsoft is hoping to replace *seven* email tools with just one.

Can I try it now?

Only if you fancy Pedigree Chum for dinner tonight.

Er, what?

Microsoft insiders said that only "brave dogfooders" are using One Outlook at the moment. In tech lingo, 'eating your own dogfood' means trying your own product before releasing it to the public for general consumption (Wikipedia has an intriguing account of its origins: www.snipca.com/37064).

Microsoft will probably spend 2021 testing One Outlook before moving it from dog bowl to dinner plate. All we've got at the moment is a very rough screenshot of the tool loading, as shown above. Let's just hope it's not a dog's dinner when it finally appears.

Should you get a... TV STICK OR TV BOX?

Confused about the best way to watch and record live TV? Want an easier way to stream online content? **Will Stapley** reveals why a set-top box might be your ideal TV companion

Watching TV used to be a simple process. You'd grab your latest copy of *Radio Times*, browse listings for the few available channels, circle what you wanted to watch, then settle down for your evening's viewing.

These days, we have a choice of hundreds of channels, a multitude of streaming services and any number ways to watch them: TV sets with built-in Freeview, set-top boxes, streaming sticks, phones, tablets and more. With the various options all promising similar features, working out which one is best for you can make your head spin.

We looked in detail at streaming sticks in Issue 593's Cover Feature (page 50), so we'll focus on set-top boxes this time round. They might be on the whole more expensive than streaming sticks, but you can do much more with them, including record programmes to keep for as long as you like. Choose the right one and you may even find yourself ditching your TV subscription service altogether, saving you hundreds of pounds each year.

We'll explain the difference between streaming sticks and set-top boxes, before considering the pros and cons of boxes in more detail. These start at just £35, so you'll find there's something for every budget – from basic players that let you watch Freeview even on old TV sets that only have SCART inputs to more powerful units that can play and record Freeview broadcasts. Most also let you stream content from online services, while some can even do so across your home network. We also reveal the key differences between the various subscription-based set-top boxes from Sky, BT, Virgin Media and more.

Armed with this knowledge, you'll be able to make an informed decision as to which setup is best for you.

WHAT YOU CAN DO

- Discover the key differences between TV boxes and sticks
- Buy a Freeview player that lets you watch the previous seven days' shows
- Record up 1,000 hours of TV on a 2TB Sky Q box
- Pair a box with a stick to get the best of both worlds

SHOULD YOU BUY A SET-TOP BOX OR STREAMING STICK?

For many years, set-top boxes were intended for watching and recording live TV broadcasts, while streaming sticks let you watch a specific streaming service (an Amazon Fire Stick for Prime Video, for example). Recently, however, the line between the two has become blurred, with most TV boxes and sticks able to stream a variety of services at resolutions up to 4K. There are still some important differences, though, as we explain here.

Size

Set-top boxes are typically about the same size as your average wireless router and connect to your TV via an HDMI cable. Streaming sticks are similar in size to a USB stick and plug directly into an HDMI socket on your TV (some come with small extender cables that make them easier to connect if space is limited behind your TV).

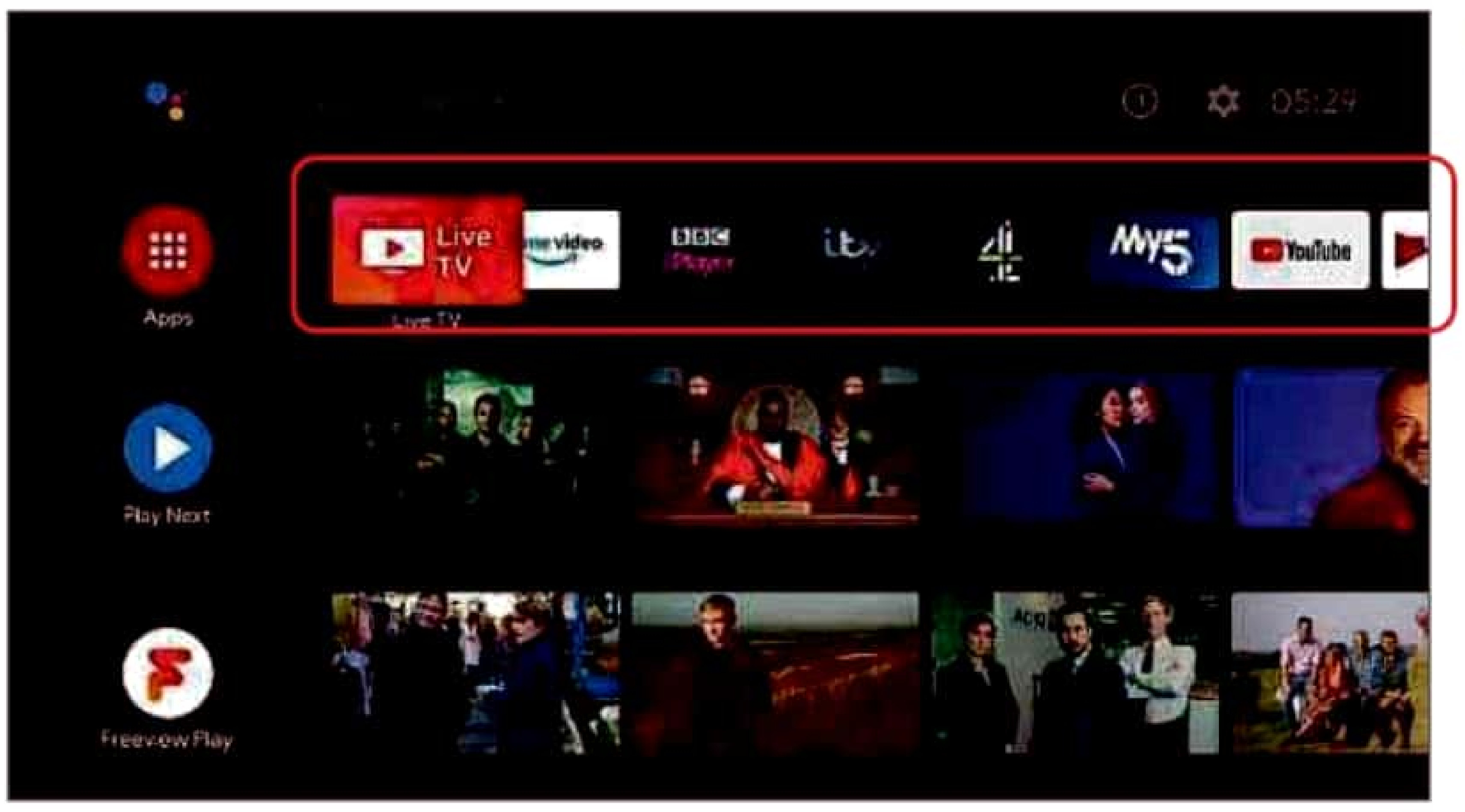
Most sticks also require a power supply. Depending on which stick you have, you may be able to power it via a USB port on your TV, though most need plugging into a USB mains adapter. If you want to reduce clutter, a streaming stick is better, but as we'll explain you'll lose some of the features available in set-top boxes.

Price

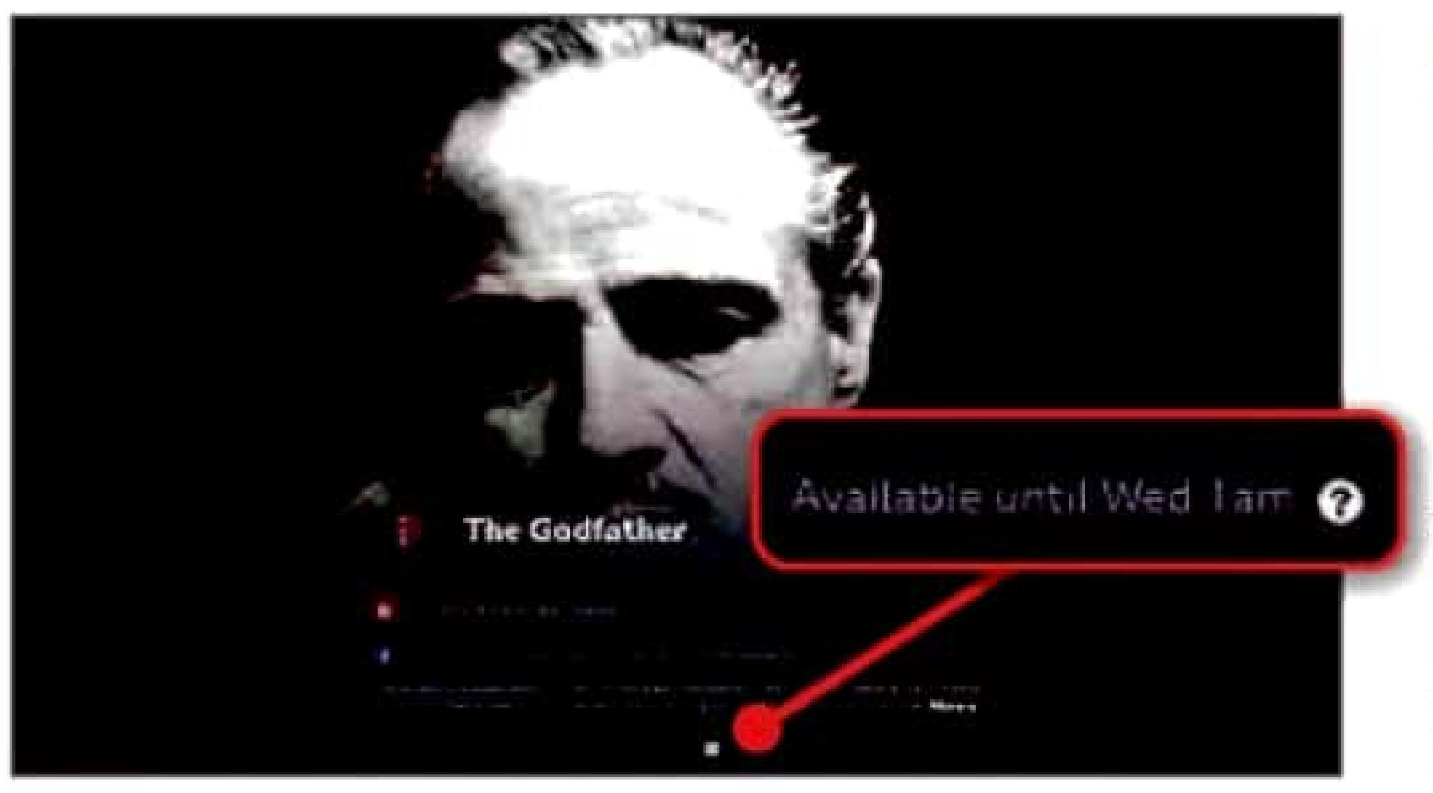
In general, set-top boxes are more expensive than streaming sticks – you can expect to pay more than £150 for a box that lets you watch and record TV, whereas most streaming sticks cost under £50. If you sign up to a TV service such as BT TV or Sky, you'll usually receive a set-top box as part of your package, with its cost factored into your monthly subscription fee.

Live TV

Streaming sticks use your broadband connection to stream programmes. Although you can use them to watch some live broadcasts (such as the BBC channels via iPlayer), should your broadband connection drop out they'll stop working. Although most set-top boxes are capable of streaming in a similar way to sticks, they also include a Freeview tuner. This means you can use them to watch live Freeview broadcasts (using the signal received by your roof-top aerial), in much the same way as plugging the aerial directly into your TV. And while any extreme weather conditions might temporarily disrupt the signal quality, your Freeview signal won't be affected if your broadband goes down.



Most set-top boxes let you access a range of streaming services as well as live TV



Services like iPlayer let you download programmes, but they won't last forever

Recording

Set-top boxes with a built-in hard drive allow you to pause, rewind and record programmes. You might think this is unnecessary given that all major channels provide catchup services, but a box that records shows gives you more control.It's true that the BBC now keeps many of its dramas and entertainment shows for one year after broadcast, though it still has to remove films and sport programmes after a shorter period - usually between seven and 30 days (look for the 'Available until...' label – see screenshot above). Even if you download a programme to your device, it won't be available to watch after this expiry date. With a set-top box you can keep the recording for as long as you like.

Better still, you can skip through advertising breaks in a flash. Watch the same show via an online catchup service and the adverts will be forced upon you with no way to avoid them.

Streaming services

The good news is that *all* set-top boxes and TV sticks let you watch streaming services, though precisely which ones will depend on the box or stick (these will usually be displayed on the box's home screen – see screenshot above). It therefore pays to work out which services you'll want to watch before deciding.

Ports and connectivity

Most streaming sticks are too small to have ports built in. Set-top boxes, however, often have audio outputs that let you connect them directly to a surround-sound speaker system. Most also have a LAN port, which means if your set-top box is near your router, you can connect the two using an Ethernet cable (meaning it won't use up valuable Wi-Fi bandwidth). Additionally, some have USB ports (pictured below) that let you play video from a USB stick.

Remote controls

If you're not a fan of small remote controls, you won't like those supplied with most streaming sticks; many are little bigger than a stick of chewing gum and are easily lost down the back of the sofa. And while some come with mobile apps that give you control from your phone or tablet, they're not as easy to use as full-size remote controls.

HDMI
CE
DOLBY AUDIO

Streaming boxes provide a much wider range of ports than sticks – some include USB ports for attaching external storage

THE BEST FREEVIEW PLAYERS

If you only want to *watch* (but not record) free-to-air channels, a simple Freeview set-top box is a cheap way to do it. Some also provide access to free catchup services from BBC, ITV, Channel 4 and Channel 5. Before buying a player, it's worth checking whether the TV you're planning to use with it already has a built-in Freeview tuner. Even if it does, the programme guide might be slow or awkward to navigate, so you may want to upgrade to a set-top box anyway.

Manhattan
Freeview

It lacks catchup services, but the T1 is a cheap way to add Freeview to a TV or monitor

Manhattan T3

£79 from www.snipca.com/37066

★★★★★

The Manhattan T3 (pictured below) is a great set-top box if you want to have quick access to programmes that have aired over the past seven days. Using its Freeview Play feature, you can scroll back in time through the box's TV guide (which we were able to navigate impressively quickly during our tests) and select a programme from the previous week. The T3 will then find the programme in the relevant catchup service (BBC iPlayer, ITV Hub, All 4 and so on).

Sadly there's no way to install apps for other streaming services such as Netflix, Prime Video and Now TV – for these you'll need a separate streaming stick such as the Chromecast (£30 from www.snipca.com/37068). That said, the T3 does come with a YouTube app, giving you everything you'd find on the YouTube website.

Because Freeview Play streams programmes via the internet, you'll need to connect the T3 to your router to watch them. You can do this using the T3's built-in Wi-Fi or an Ethernet cable. If you don't connect the box to your router, you'll still be able to use it, but only to watch live TV. Unlike with Freeview recorders (which we'll look at in a moment), you can't pause or rewind live TV.

The T3 supports 4K video, but you'll need a 4K TV to take advantage of this. Nevertheless, even if you don't have a 4K TV now, it's likely your next TV will probably support this higher resolution. And the truth is that, at present, there's not a huge amount of 4K content to watch on Freeview. Having previously suspended its 4K content during the first lockdown, the BBC relaunched it last September – though only on a few programmes, such as *His Dark Materials*.

On the rear of the box there's an HDMI port (an HDMI cable is included in the package) and a 3.5mm AV port. The latter is useful for connecting an old TV set that doesn't have HDMI ports, though you'll need to buy an adapter kit (£5 from www.snipca.com/37069), which lets you plug the box into an RCA (red, white and yellow circular sockets) or SCART input on your TV. There's also an optical audio output, letting you connect it to a compatible surround-sound speaker system. Despite the T3 having a USB port, this can be used only for upgrading its firmware, not for playing media from USB storage.

Manhattan
FreeviewPlay
OK
Manhattan
FreeviewPlay

The Manhattan T3 lets you watch the past seven days' programmes via Freeview Play

Manhattan T1

£35 from www.snipca.com/37067

★★★☆☆

The T1 (pictured above) is a compact box that lets you watch all Freeview channels. However, at half the price of the T3, it makes a number of compromises. Most notably, the T1 lacks Freeview Play, which means you can't watch catchup TV on it. There's also no YouTube app. If you connect the T1 to your router via an Ethernet cable (unlike the T1, there's no Wi-Fi option), you'll get access to a small selection of internet TV channels, such as Planet Knowledge and kids channel Ketchup TV.

The HDMI output on the rear lets you watch HD Freeview channels, but it doesn't support 4K. If you have a relatively new TV, it probably already has a built-in Freeview tuner, and the T1 is unlikely to offer much beyond what your TV is already capable of.

However, its menus are easy to use and it's a cheap way to add Freeview to an old, non-smart TV. And because it has the same 3.5mm AV output as the T3, you can connect it to a TV that has only a SCART or RCA input. It's also a great way to make use of an old PC monitor. As long as it has an HDMI port and built-in speakers, you'll be able to use your monitor as a TV (as one reader already does – see page 43).

THE BEST FREEVIEW RECORDERS

Manhattan T3-R

£166 (500GB); **£197** (1TB)

www.snipca.com/37079

★★★★★

Although the Manhattan T3-R (pictured right) looks very similar to the T3 (albeit with a slightly chunkier design) and shares many of the same features, there is one big difference – the T3-R has a built-in hard drive.

The 500GB version is capable of storing up to 300 hours of standard-definition programmes or just under half that when recording HD. While this may sound like plenty, if you tend to record multiple series, you'll soon find yourself having to ditch some to free-up space for new recordings. We therefore recommend paying the extra £30 for the 1TB version.

When it launched in 2019, the T3-R's two Freeview tuners let you record one channel while watching another (or record two simultaneously), but thanks to a software update last December you can now record two channels while watching a third.

The update also added support for the streaming service BritBox (£5.99 per month, www.britbox.com) and a new 'padding' tool. By default, the T3-R will start and stop recordings in line with the programme's scheduled broadcast time, but if there's a slight alteration in the timings you may find the start or end of a programme isn't recorded. The padding feature lets you add a set number of minutes at either end of each recording, ensuring you don't miss anything.

Like the other Manhattan boxes here, the T3-R performed well in our tests, with the programme guide quick to respond to button presses on the remote control. We also enjoyed using the Smart Search feature, which returns instant results as you type. It supports 4K content and has the same 3.5mm output as on the T1 and T3 for older TVs.

We'd like to see more support for streaming services such as Prime Video and Netflix, but the T3-R is an otherwise excellent Freeview recorder.

A recent update to the T3-R lets you record two channels while watching a third

Humax Aura

£249 (1TB); **£279** (2TB)

www.snipca.com/37080

★★★☆☆

Released in November last year, the Aura (pictured right) is the newest Freeview recorder on the market. It's also the most expensive, with the 1TB version costing around £50 more than the Manhattan T3-R, but you get a lot for your money.

The box is based on Google's Android TV operating system, which means you can download a wide range of apps from the Google Play store, including Prime Video, Disney+, BT Sport, BritBox and more. Netflix and Now TV aren't supported.

Thanks to the Google software underpinning the Aura, it can also work as a Chromecast. This means you can cast content from your phone, tablet or PC directly to your TV.

The Aura has three Freeview tuners, which combine to let you record up to four channels while watching a fifth. There's also supposed to be a companion app for the Aura, letting you stream live TV and recordings on the box to other devices on your home network as well as schedule recordings remotely. However, Humax has delayed the app's release and there's no word yet as to when it'll arrive, which is disappointing.

We like the extra features offered by Android TV, but the lack of support for Netflix and Now TV, along with the delayed app, limits the Aura's appeal, particularly given its high price.

Powered by Android TV, the Humax Aura gives you access to a wide range of apps

The Humax FVP-5000T has some useful home-networking features, but its menus feel sluggish

Humax FVP-5000T

£179 (500GB); **£200** (1GB); **£245** (2GB)

www.snipca.com/37081

★★★☆☆

Although the Aura is designed as its successor, Humax's FVP-5000T is still available and £40 cheaper. Unlike the Aura, it runs Humax's own operating system, which is its biggest disadvantage. We found the on-screen menus were slow to respond, which makes navigating the programme guide frustrating.

While the Manhattan boxes all have a USB port, these are only used for applying software updates. However, the USB port on the FVP-5000T lets you attach a USB stick or hard drive, then play content (music, photos and videos) directly to your TV. Impressively, you can also stream media to the Humax from computers on your network – especially useful if you have a PC or a NAS drive that contains media files.

Along with Freeview (including catchup services) and the YouTube app, the FVP-5000T also supports Netflix – though you'll need a subscription to watch it (Netflix recently announced a price hike, with the cheapest plan increasing to £9.99 in February). There's no support for other services like Now TV or Prime Video.

The FVP-5000T's home-networking features are useful, but its slow operation lets it down. Additionally, the fact the last software update was nearly two years ago indicates Humax will focus on the Aura for any future updates.

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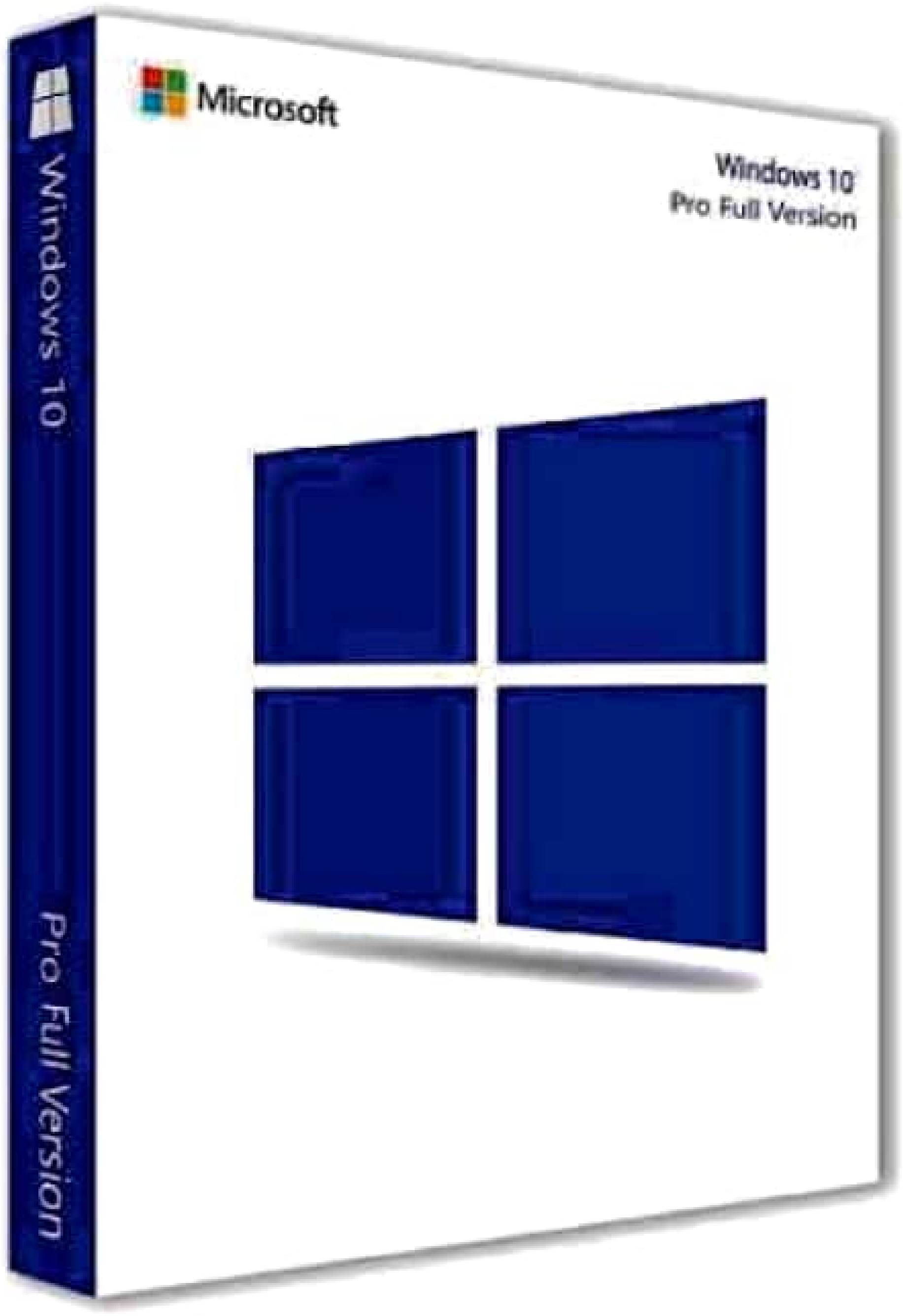
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JUST SO YOU KNOW...

We have a limited number of **Windows 10 Pro** codes for this offer, but we should have enough to satisfy the high demand we anticipate from readers

THE BEST SUBSCRIPTION SET-TOP BOXES

If you're happy to pay a monthly fee and sign up to a contract (usually either 18 to 24 months), you can get a new set-top box along with a choice of extra TV channels from an internet service provider (ISP). In most cases, you'll need to buy a package that includes broadband *and* TV. In our reviews below, we've therefore quoted the price for the cheapest broadband and TV package that includes a set-top box capable of recording.

The Sky Q box can stream TV programmes to a maximum of four Q Mini boxes

BT's G4 box is fast and easy to use, but doesn't link up to other boxes or devices in your home

Sky Q

From **£39** per month
www.sky.com
★★★★★

Sky is the only major ISP that lets you sign up for its TV service without committing to its broadband, meaning you can use it even if you're tied into a contract with another ISP. The cost of Sky Q *without* broadband is £29.99 per month.

As well as connecting to a single TV via an HDMI cable, the Sky Q set-top box (pictured top of page) can serve as a media hub for your entire home. Add Sky's Multiroom service to your package (an extra £12 per month) and you'll get a Q Mini box for a TV elsewhere in your home. The Q Mini boxes don't have a built-in hard drive or tuner, but instead stream content (live TV and recordings) from the main Sky Q box.

The Q Mini boxes create a mesh Wi-Fi network, boosting the signal of your home's wireless network wherever a Mini box is located. However, this works only if you've also signed up for Sky's broadband.

You can connect up to four Q Mini boxes (and therefore watch on four TVs), but how many you can use simultaneously will depend on the terms of your package. The basic 1TB Sky Q lets you watch on two Q Mini box-connected TVs at the same time, while the 2TB box (the price of this depends on your Sky package, but you can expect to pay between £65 and £120 for it) lets you use four boxes at the same time.

As well as being able to store twice the amount of recordings (1,000 hours of standard-definition content compared with 500 hours on the 1TB box), the 2TB box also supports 4K, and Sky has plenty of 4K content to take advantage of this. The 1TB box and the Q Mini boxes only support HD.

The basic Sky package is similar to that of other providers, but if you sign up to broadband and all channels (including Sky Cinema and Sky Sports), the monthly cost will be around £100 per month. Sky Q also supports Netflix and, as of last month, Prime Video, and can also stream to other devices such as your phone or tablet.

With a slick design, easy-to-use remote control (which supports voice commands) and the ability to connect multiple Q Mini boxes, the Sky Q box does a great job of streaming TV across your entire home.

BT TV

From **£39.99** per month
www.bt.com/tv
★★★★☆

BT offers three TV set-top boxes (all made by Humax) – the one you get will depend on which package you choose. Most packages come with the G4 (pictured above) – a standard-definition box with a 500GB hard drive.

Opt for the VIP package (which includes BT Sport as well as Sky channels and costs £65 per month) and you'll get the G5 box. This is essentially the same as the G4 box, but with added support for 4K. Although the G5 originally came with a 1TB hard drive, in 2019 BT reduced this to 500GB, citing the fact that most people now streamed content rather than recorded it. As the 500GB hard drive can record only 30 hours of 4K content, it was a disappointing decision.

BT also offers a smaller Z4 box, which you can buy as an add-on to your package for £5 a month. This doesn't include a hard drive, which means you can't record programmes, but it does let you pause and rewind live TV for up to 30 minutes.

Unlike the boxes we reviewed on pages

What broadband speed does your TV box need?

If you use your set-top box to watch only terrestrial TV (BBC1, BBC2, ITV, Channel 4 and Channel 5), you won't need to worry about your broadband speed because terrestrial broadcasts are all sent over the air and through your aerial, not via your broadband. Start watching catchup TV or streaming services, however, and you'll need to ensure your broadband is up to the job.

Thankfully, standard-definition streams only require 1.5Mbps of bandwidth, while even HD streams aren't particularly demanding at around 5Mbps. However, if you want to enjoy 4K streams (such as those provided by Netflix or BT Sport Ultimate), you'll need to ensure your broadband connection can reach at least 25Mbps.

And remember, these figures only relate to each individual stream, so if you're watching a 4K movie in your lounge while someone else is streaming an HD programme upstairs, the two will gobble up around 30Mbps of your bandwidth.

Bear in mind that if your broadband speed is only *slightly* higher than this and another device (such as a smart speaker or a PC running an online backup service) starts using your internet connection the picture quality on your video stream may start to deteriorate.

52 and 53, which are based on the Freeview Play service, BT's boxes use YouView. There's little difference between the two – both offer the same free-to-air channels and let you access catchup services via built-in apps or by browsing the past seven days in the TV guide. They also include apps for streaming services including Netflix and Prime Video.

We found the BT boxes easy to navigate and responsive to our button-pressing on the remote control. However, they are starting to show their age. You can't stream recordings from one box to to another (or to your phone and tablet) and you can't use voice commands.

To get BT TV, you need to also have your broadband with BT. You can either sign up to a brand new BT TV and broadband package or, if you already have BT Broadband, add TV to your existing service from £10 per month.

The new Virgin TV 360 box replaces the old V6, but the two look identical

youview | TalkTalk
HUAWEI
The TalkTalk Plus box has a smaller hard drive (320GB) than its rivals

Virgin TV

From £29.99 per month
www.virginmedia.com
★★★★☆

Virgin provides its TV, broadband and phone service via its own cable network, not the network run by BT Openreach (enter your postcode at www.snipca.com/37103 to check availability).

Until recently, Virgin supplied the V6 set-top box as part of its TV package. Supporting 4K and with a 1TB drive, the V6 box lets you stream recorded content to mobile devices as well as to any other V6 boxes in your home (additional boxes cost around £125, plus an extra £7.50 per month). You can also use them to stream services such as Amazon Prime Video and Netflix.

However, Virgin recently replaced the V6 with its new TV 360 box (pictured top of the page). The hardware inside the box is identical, but upgraded software lets it work in a similar way to Sky Q in that it functions as a hub for Virgin's new Mini boxes. The Mini boxes connect to the main box via Wi-Fi to stream existing recordings and schedule new ones. They need to be connected to a nearby cable socket to receive live TV, whereas Sky's Q Mini boxes stream all TV (live and recorded) from the main box.

Like the old V6 boxes, the TV 360 and Mini boxes support 4K. The TV 360 also supports voice commands via the remote control, so you can say things like "skip forward 5 minutes" or "open Netflix". It also lets you set up profiles for everyone in your household.

If you're an existing Virgin V6 customer, you won't need to pay for new boxes. Instead, you can simply upgrade the software in your existing ones to the new TV 360 service. Virgin says it will start offering these free upgrades in the coming months. We'll have a full review of the TV 360 box in a forthcoming issue.

TalkTalk TV

From £24 per month
www.talktalk.co.uk/tv
★★★☆☆

As with BT and Plusnet, the TalkTalk Plus set-top box (pictured above) is based on the YouView service. While this means you can access the same free live and on-demand channels, as well as subscription services like Netflix and Prime Video, there are some important differences. Most notably, the TalkTalk Plus box has a 320GB hard drive, meaning it can store only 180 hours of standard-definition recordings (or 70 hours of HD). It also won't link up with other devices in your home.

The box is made by Huawei rather than Humax. We didn't experience any problems with it, but there are plenty of unhappy customers online complaining about it freezing.

If you want to add TV to other rooms in your home, you can buy a basic TalkTalk box (without the recording feature of the Plus box) for a one-off charge of £50 (including £25 installation fee).

What happened to Plusnet and EE TV?

On 13 January, Plusnet announced that it would no longer be taking on new customers for its TV service. Plusnet had previously offered this for just £5 per month via a Humax Youview box (pictured), which is similar to BT's G4. The company says it will continue to provide its TV service to existing customers for the duration of their contract.

Meanwhile, following its decision to end its own TV service in 2019, EE is about to finally call time on its TV. If you're currently using an EE set-top box, you can expect it to stop working on 31 March.

SHOULD YOU USE A BOX *AND* A STICK?

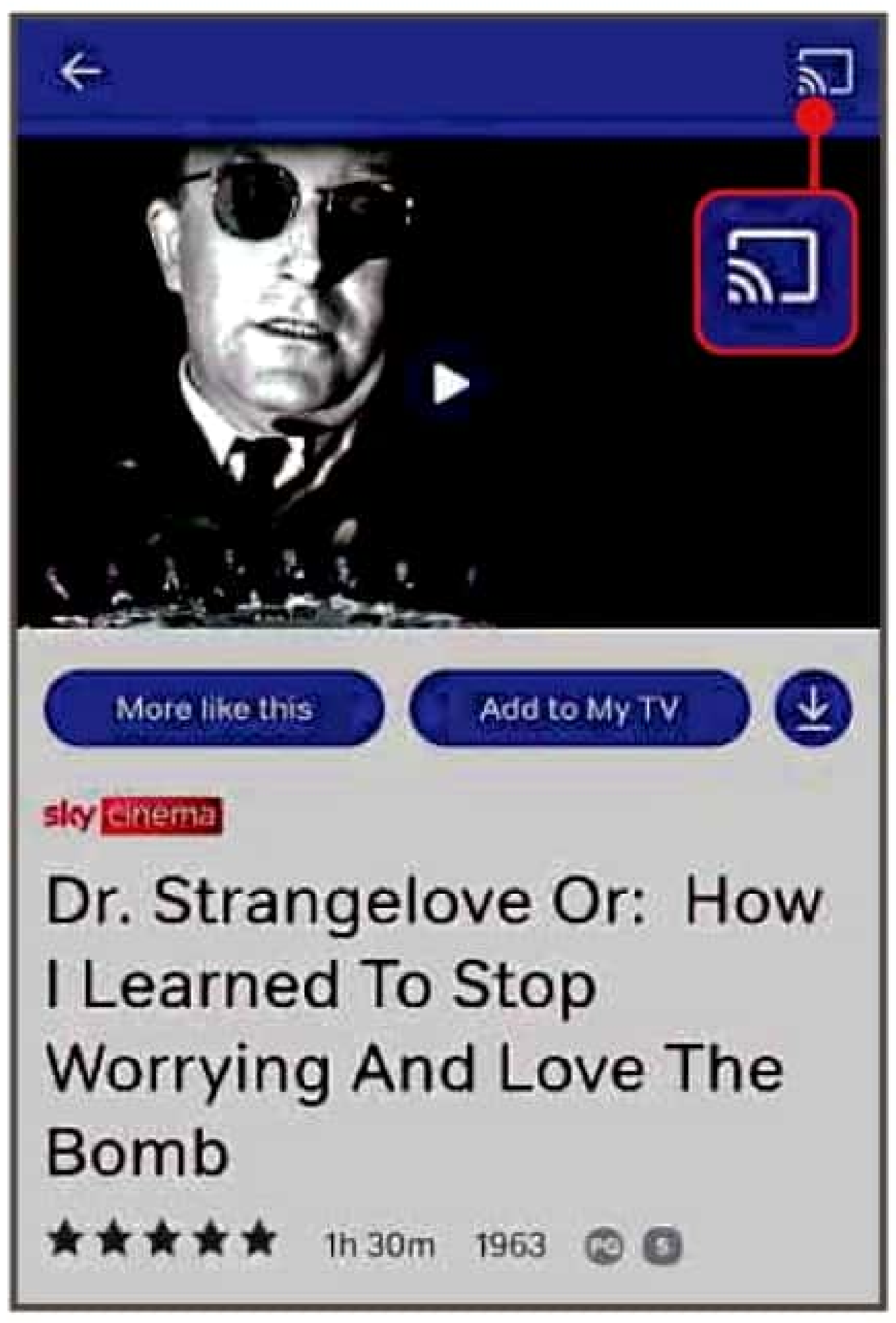
All the set-top boxes we've looked at on pages 52 to 56 let you watch live TV and free catchup services, but you may find your chosen box lacks support for your favourite streaming service. If so, adding a streaming stick can usually bridge that gap.

Our top pick is the **Amazon Fire Stick Lite** (pictured right, £30 from www.snipca.com/37117). Originally designed specifically for streaming the Amazon Prime Video service to your TV, it now supports a wide range of other services, including Netflix, Disney+ and BritBox.

As with most streaming sticks, the remote control is small, but it is voice enabled, meaning you can speak most commands instead of having to struggle with the tiny buttons. You can also use it to control Amazon Echo smart speakers.

'Cast' to your TV

The Fire Stick does have some flaws, though, most notably that it doesn't let you stream Now TV or BT Sport. If either of these are important to you, and your set-top box doesn't provide apps for them, the **Google Chromecast** (www.snipca.com/37068) is worth considering.



Dr. Strangelove Or: How I Learned To Stop Worrying And Love The Bomb

★★★★★ 1h 30m 1963

Google's Chromecast lets you stream content to your TV from other devices, such as your phone

At just £30, the Fire Stick Lite lets you stream from most services and use voice commands

The cheapest version costs £30 and has excellent support for streaming services – the only one it can't link up with is Apple TV+.

It works in a different way to most other sticks. Instead of using built-in apps, it uses casting. So to watch Now TV, for example, you'd need to open the Now TV app on your phone then tap the Cast button (see screenshot left) to cast it to the Chromecast plugged into your TV.

It's also worth noting that the Chromecast doesn't have a remote control – you instead use the computer, phone or tablet to control playback.

Stream in 4K

Neither the Fire Stick Lite nor basic Chromecast can stream 4K content. If that's a dealbreaker, the **Chromecast with Google TV** (£60 from www.snipca.com/37118), which launched late last year, is worth a look. Along with 4K support, it includes the casting capabilities of the cheaper Chromecast and adds support for built-in apps, meaning you can watch programmes without having to cast it from another device such as your phone. It also comes with a voice remote control.

The Roku Streaming Stick+ works with almost all streaming services and supports 4K

However, we prefer the 4K **Roku Streaming Stick+** (pictured above, £60 from www.snipca.com/37119), which supports all streaming services except BritBox. The recommended retail price quoted above is the same as Google's stick, but it's almost always discounted on Amazon – at the time of writing it cost just £48 and has previously been as low as £29.99.

What to watch out for

There are some other things to bear in mind if you plan to pair a set-top box and streaming stick. You will find yourself frequently switching between inputs on your TV. When watching live broadcasts you'll need to use the set-top box, then when you want to stream via a service such as Prime Video, you'll need to switch to your stick.

You'll also need to make sure your TV has enough HDMI sockets. If it only has two, and you already have a DVD player and set-top box connected, you'll find yourself having to continually plug and unplug cables depending on what you want to watch.

One option is to buy an HDMI switch, which lets you plug multiple devices into a single HDMI port (such as UGreen's, which turns one HDMI port into three – £17 from www.snipca.com/37116). ca

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WINDOWS PowerToys
DON'T BUY THE WRONG TV STICK
Every NEW streaming device tested p50
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NOW TV
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EVERY WINDOWS TOOL THAT WILL DISAPPEAR SOON

Is Microsoft about to kill off your favourite Windows feature? **Jonathan Parkyn** reveals the tools whose days are numbered and what you can use instead

TOOLS MICROSOFT IS DEFINITELY KILLING OFF

Snipping Tool

Since 2018, Microsoft has been threatening to replace Snipping Tool – Windows' handy built-in feature for taking and editing screenshots that's been part of the operating system since Windows Vista – with a more 'modern' alternative. It's still there, but only just.

Launch the tool (search for it in the Start menu), and you'll see a warning that 'Snipping Tool is moving...'. The warning doesn't include a deadline date, but preview versions of the next Windows Feature update (due in Spring) reveal Snipping Tool is due to be downgraded to an optional feature. This means you'll have to enable it yourself (click start, type manage optional features, click 'Add a feature', then tick the relevant box) and suggests it's likely to be killed off completely within the next 12 months.

Thankfully, Microsoft has already provided an alternative app. 'Snip & Sketch' arrived with 2016's Anniversary Update and provides a more comprehensive range of editing and highlighting options.

You can also launch it quickly using the Windows+Shift+S keyboard shortcut. If you want something with even more features, try PicPick (https://picpick.app), which has a built-in image editor that lets you blur sensitive details from your screenshots.

Windows To Go

This tool allowed you to install and run Windows 10 from a bootable USB drive and was a great way to launch your own copy of Windows on practically any PC. Sadly, Microsoft stopped supporting it last year. While it's still technically possible to create and use Windows To Go (WTG), Microsoft's decision to drop the tool means that it will no longer support future Windows Feature updates, effectively rendering it dead in the water.

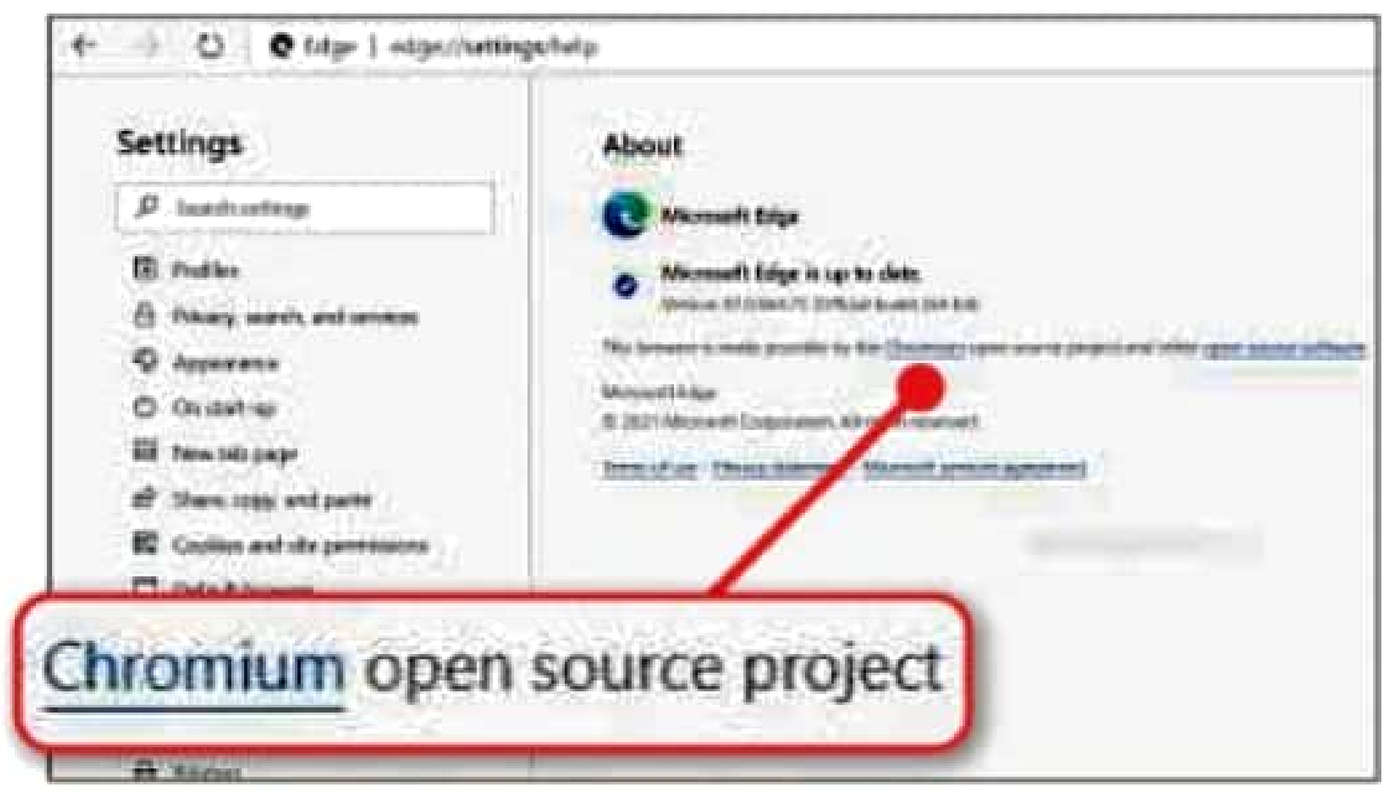
There are other ways to achieve the same thing, however, no matter what version of Windows 10 you're running. Start by grabbing a USB drive with at least 8GB capacity, then download a Windows 10 ISO file at www.snipca.com/37078. Choose Windows 10 under 'Select edition', then click Confirm. Choose English in the 'Select product language' dropdown menu and click Confirm, then select the 32bit or 64bit version.

Once the ISO has downloaded you can't simply drag and drop it on to your USB stick – you'll need another tool. Download the portable version of Rufus from https://rufus.ie, then run it and select your USB drive under Device. Click 'Select' and navigate to your Windows ISO file, then select Windows To Go from the 'Image option' menu and click Start. Bear in mind that any data on the USB drive will be wiped in the process.

Legacy Edge

Edge – Microsoft's first attempt at a web browser for Windows 10 – was a disappointing failure, so it's no surprise that the company added it – or 'Legacy Edge' as it's now known – to a list of tools it's no longer developing (www.snipca.com/37074). It also means Microsoft could soon withdraw all support for the browser, making it potentially unsafe to use.

As regular readers will know, the company has released a new and much improved version of Edge based on the same Chromium source code as Google's Chrome browser. To check which version you're using, open Edge, click the menu button (three dots, top right), Settings, then About Microsoft Edge. The new


Settings
Profiles
Privacy, search, and services
Appearance
On start-up
New tab page
Share, copy and paste
Cookies and site permissions
About
Microsoft Edge
Microsoft Edge is up to date.
Chromium open source project

If you're not running the newer Chromium version of Edge, you should update now version will have the text 'This browser is made possible by the Chromium open source project...' (see screenshot below left).

If you're still running the old version, you can replace it with the new Edge by downloading it from www.microsoft.com/edge.

XPS Viewer

Back in 2006, Microsoft developed the XPS format (ending in '.xps' and '.oxps'), hoping it would rival Adobe's PDF. It didn't, and Microsoft has admitted defeat by removing the XPS Viewer component from Windows. Although the tool will remain installed if you update your current version using Windows Update, it will no longer be installed on fresh installations of Windows.

Should you ever need to open and view XPS files, you can install it via the 'optional features' section of Windows, (see Snipping Tool section).

TOOLS MICROSOFT IS NO LONGER DEVELOPING

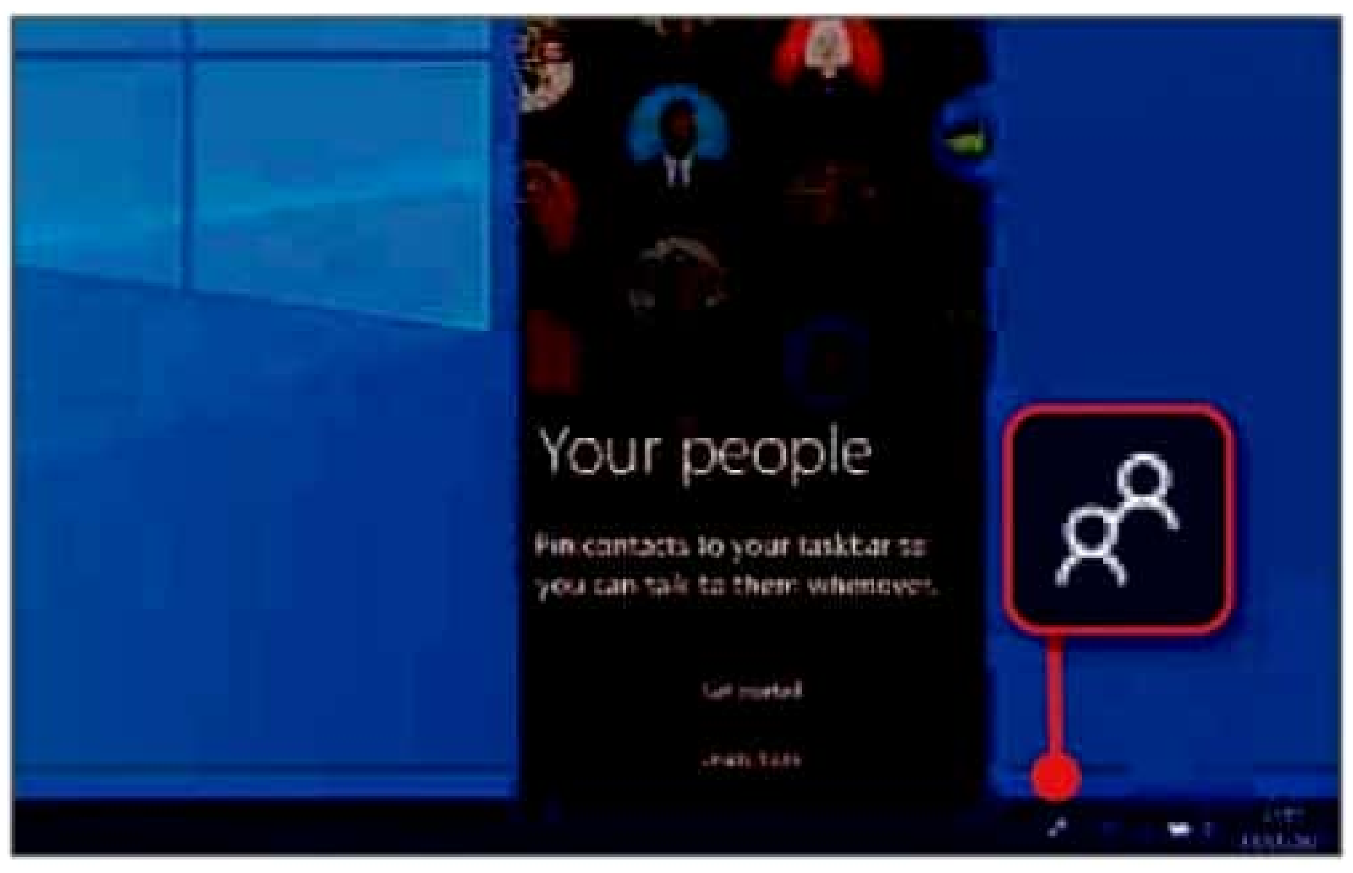
Paint

When Microsoft announced in 2017 it was killing off this 35-year-old image-editing tool in 2017, the public outcry resulted in the company performing an embarrassing U-turn. We still love Paint's effortlessly simple design and hope it'll stick around a while longer, but Microsoft is no longer developing it.

If you're looking for a replacement, Paint.NET is the obvious choice. While there are many more features to get to grips with compared with Paint, it's basic and easy-to-use interface makes the transition a breeze. The Windows app version costs £5.79, but the traditional desktop version (available from www.getpaint.net) is still free.

My People

Introduced in 2017's Creators Update, the My People tool in Windows lets you place a shortcut to your three favourite contacts on your taskbar, so they're only ever one click away. You can try it out by right-clicking the taskbar, ticking 'Show People on taskbar', then clicking the People icon (see screenshot above right) and clicking 'Get started'. Don't get too used to it, though, as Microsoft has said the feature "may be removed in a future update" – presumably because hardly anyone ever uses it.



Pin contacts to your taskbar so you can talk to them whenever.

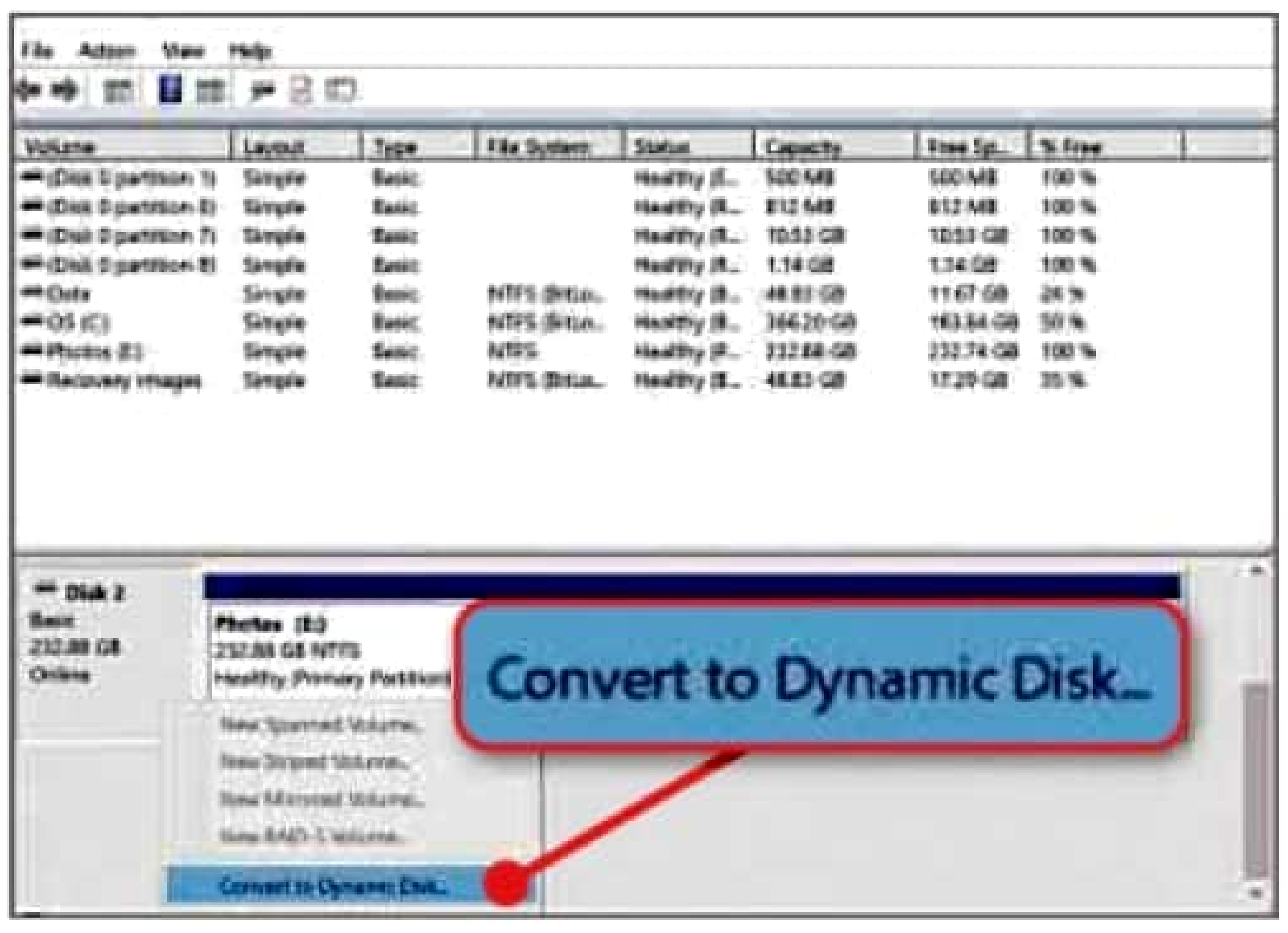
Windows lets you add shortcuts to favourite contacts on the taskbar, but this feature is on borrowed time

Internet Explorer

As well as killing off Legacy Edge, Microsoft is also gradually pulling the plug on its ageing Internet Explorer (IE) browser. It won't be ditching it completely, though – the company has committed to supporting IE for as long as Windows 10 (as explained in the lifecycle support document at www.snipca.com/37075). While this means IE will continue to get security updates, Microsoft clearly wants to ween users off the browser. It's no longer getting new features or tools, and is now classified as an optional Windows feature.

Microsoft's Chief of Security Chris Jackson even posted a blog article outlining the perils of using IE as your default browser (www.snipca.com/37076), citing lack of support for new web standards as a key problem.

Microsoft also recently announced that from 17 August 2021, Internet Explorer 11 will no longer be supported by the company's online services, including Microsoft 365, OneDrive and Outlook.com. In short, if you're still using IE, switch to the new version of Edge (see above) or an alternative browser as soon as possible.



Dynamic Disks lets you turn multiple hard drives into a single storage space

Dynamic Disks

When it released the May Update for Windows last year, Microsoft announced that Dynamic Disks was among the features it was no longer planning to develop. Dynamic Disks lets you create a drive in Windows that comprises multiple *physical* hard drives, so your D drive could span three hard drives, for example.

You can access it by opening the Disk Management tool (right-click Start, then select Disk Management) then right-clicking a hard drive and selecting 'Convert to Dynamic Disk...' (see screenshot above). Don't worry if you've previously used Dynamic Disks – the tool hasn't disappeared yet, and Microsoft plans to incorporate its functions into a future version of its Storage Spaces tool. ca

5 more tools we think are under threat

Control Panel

Microsoft is steadily moving Control Panel's tools to the Settings app, so it's only a matter of time before it becomes completely redundant.

Backup and Restore (Windows 7)

This tool is designed to let you access backups from Windows 7, not create new ones. To do that, use File History (search for it in the Start menu).

Windows Media Player

It might be easy to use, but WMP has long been neglected by Microsoft and we doubt it'll receive further updates. Replace with MusicBee (https://getmusicbee.com) to play audio and VLC (www.videolan.org) for video.

WordPad

Another Windows relic, WordPad can't open newer DOCX files and has limited features. Use the excellent LibreOffice instead (www.libreoffice.org).

Windows Fax and Scan

When did you last send a fax? Precisely. And for scanning, you're better off using the tool that came with your scanner.

DOUBLE YOUR VIRUS PROTECTION FOR FREE

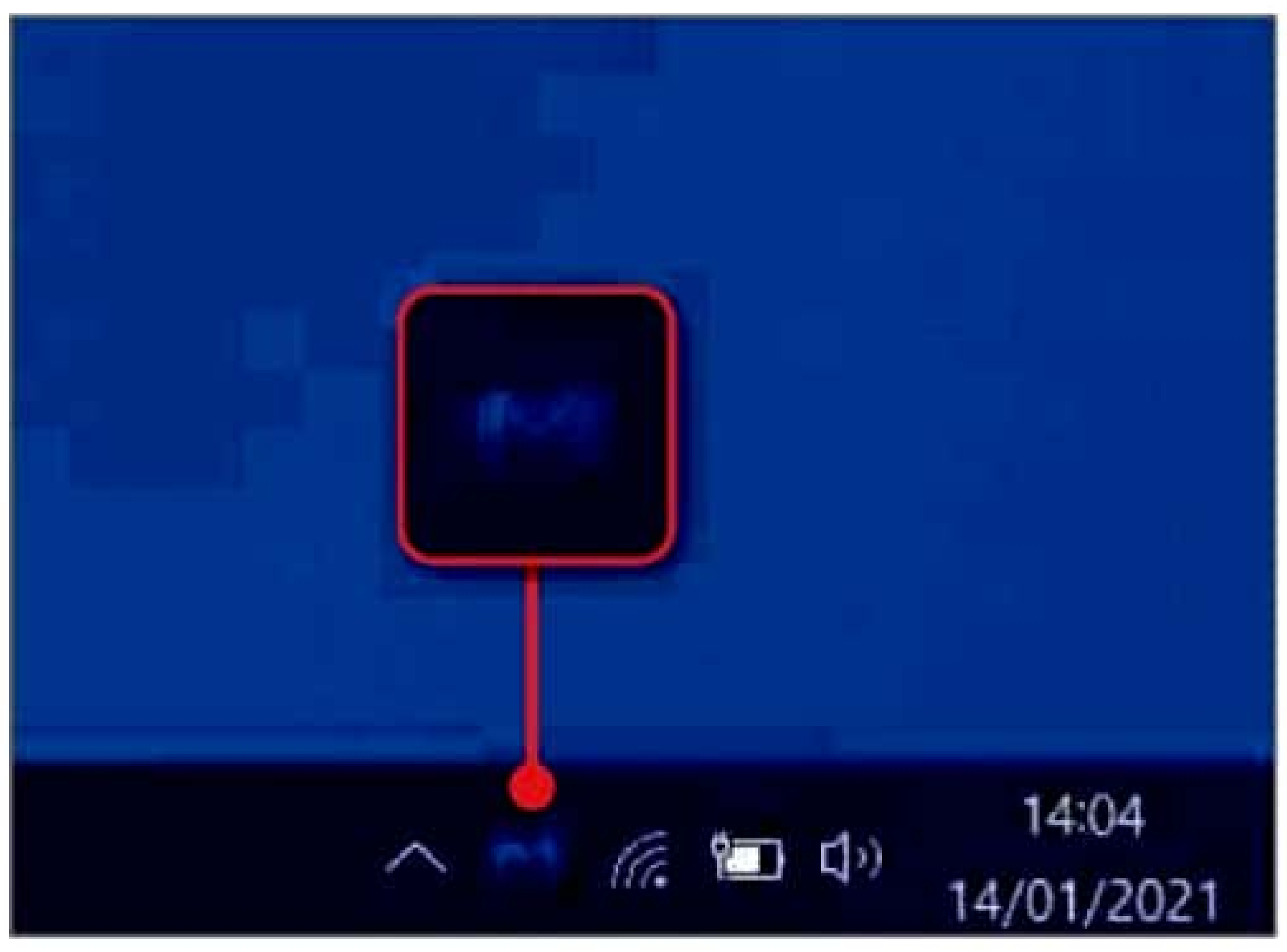
Malwarebytes can add a second layer of protection to your computer, though you need to disable some settings to prevent conflicts. **Will Stapley** explains how

Run 'on-demand' scans for free

There are two versions of Malwarebytes: the free Malwarebytes Basic (www.snipca.com/37111 – click the green Download Free button in the For Windows section) and the paid-for Malwarebytes Premium for £29.99 (though readers can get it for £10 less on our Software Store at www.snipca.com/37112). Before looking at Malwarebytes Premium, we'll explain how the free Basic version can strengthen your protection.

Malwarebytes Basic is an 'on-demand' antivirus tool. This means that instead of continuously scanning for viruses whenever your PC is switched on, it will only scan when you tell it to. You may want to do this if you've recently installed a program that you're not sure about, or if you accidentally opened an attachment in a dodgy email.

In both cases your main antivirus tool should pick up any potential threats, but running Malwarebytes gives added peace of mind – think of it as a second opinion. To perform a scan, open Malwarebytes – by double-clicking its icon in the system tray (see screenshot below) or searching for it in the Start menu – then click the Scan button.



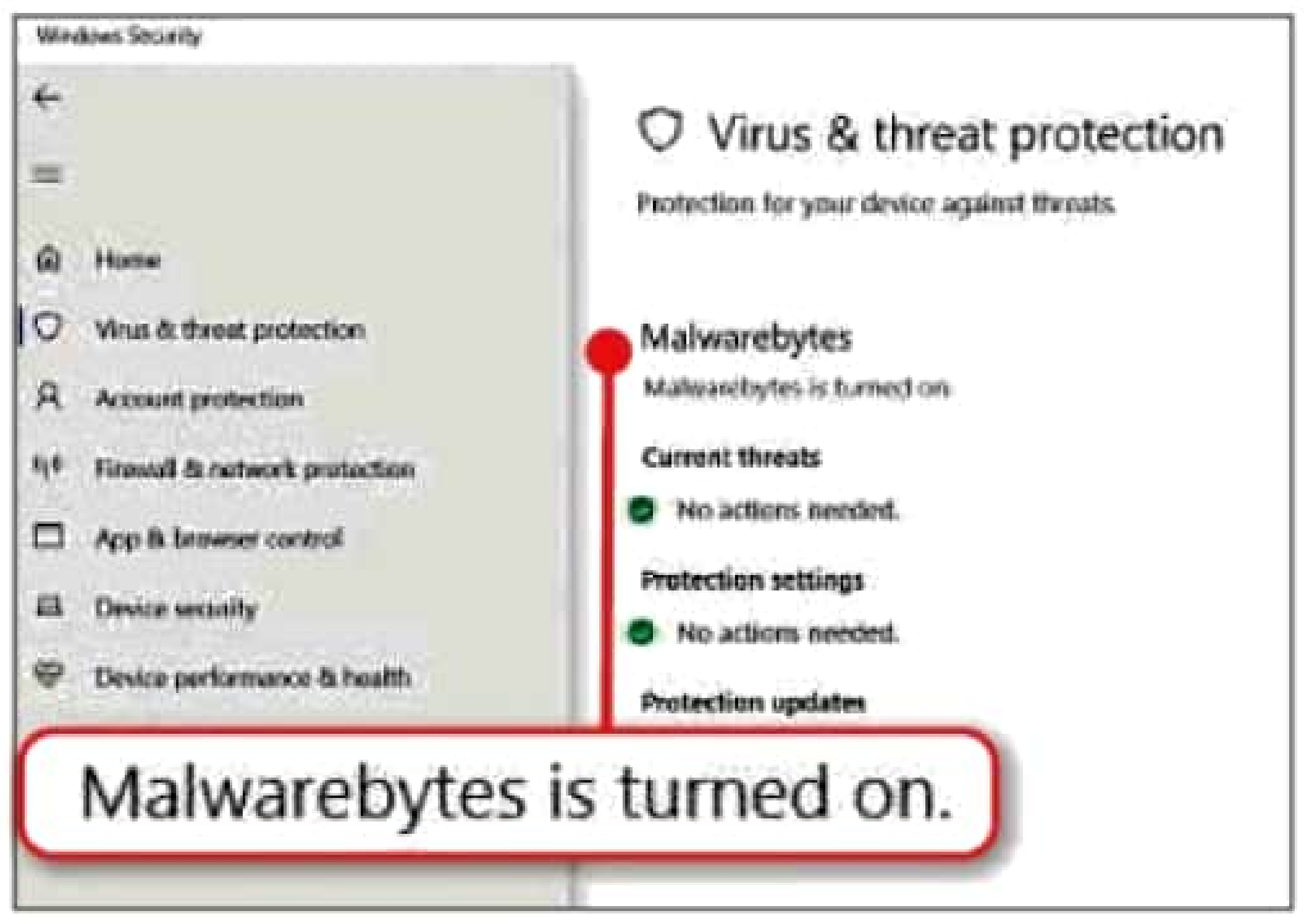
You can launch Malwarebytes directly from the system tray

Scan in real time using Malwarebytes Premium

Malwarebytes Premium, on the other hand, includes real-time scanning, meaning it constantly scans and protects your PC from viruses and other malware. In general, we don't recommend running two antivirus tools that perform this type of scanning. Due to the way they search for threats, one tool will often identify the other as a virus, causing your scans to slow down or freeze completely – affecting your entire PC as a result.

However, Malwarebytes is designed to coexist with other antivirus programs (whether that's Microsoft Defender or a security suite such as Norton 360 Premium – see our Reader Offer, page 70). This means you can have both scanning for viruses simultaneously.

To ensure this happens without problems, you need to first change a setting in Malwarebytes. Since version 4, (released in 2019) Malwarebytes Premium registers itself as the primary antivirus tool in Windows, which means it will take over antivirus scanning from Microsoft Defender or whichever third-party suite you're using.


Windows Security
Home
Virus & threat protection
Account protection
Firewall & network protection
App & browser control
Device security
Device performance & health

Virus & threat protection

Protection for your device against threats.

Malwarebytes

Malwarebytes is turned on.

Current threats

No actions needed.

Protection settings

No actions needed.

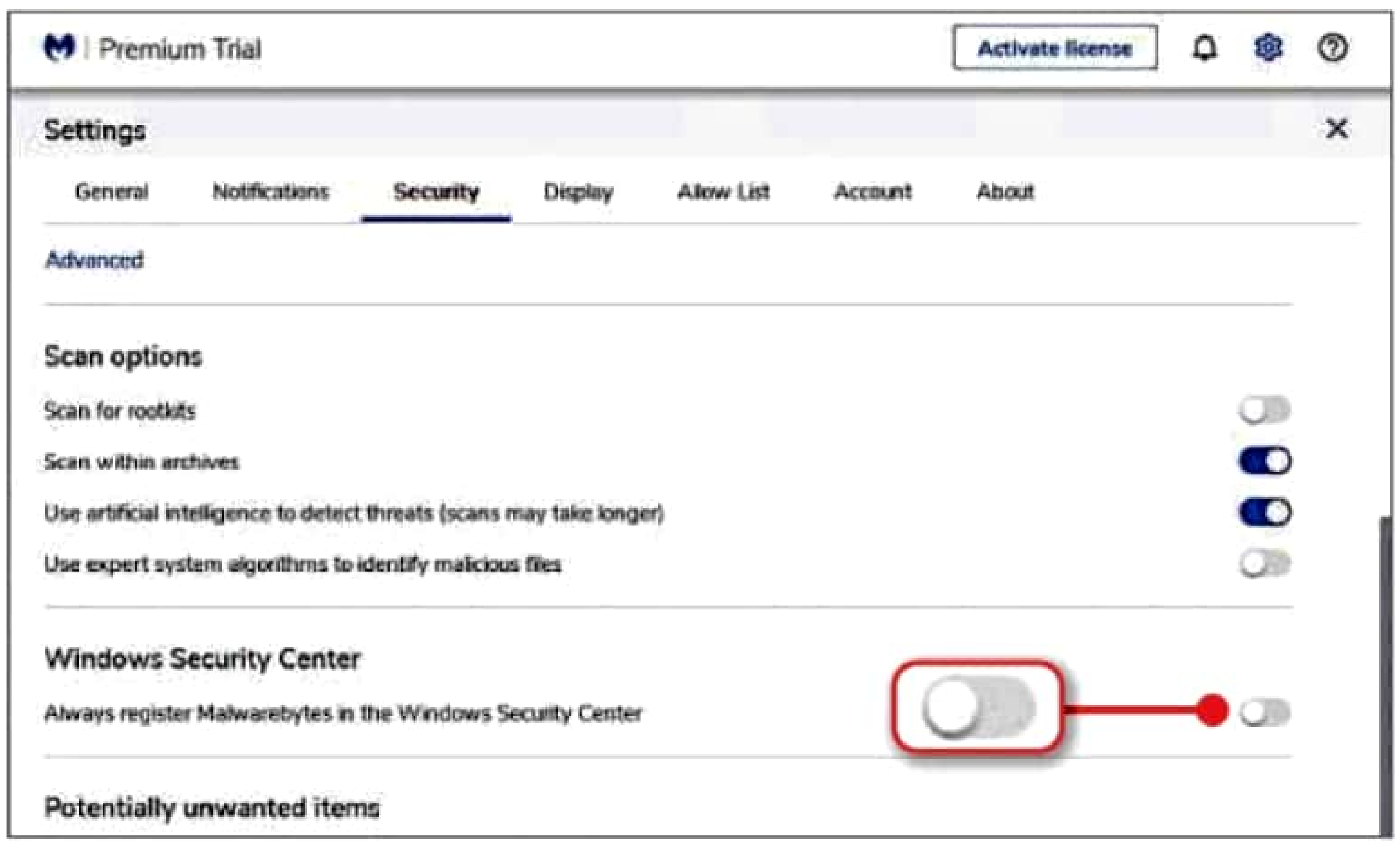
Protection updates

Malwarebytes is turned on.

By default, Malwarebytes Premium registers itself as the primary antivirus tool in Windows

If you install Malwarebytes Premium, you can check this by clicking the Start menu, typing windows security then pressing Enter. When the Windows Security window appears, click the 'Virus & threat protection' option. As you can see in our screenshot below left, Malwarebytes is listed as our sole antivirus tool (Defender is switched off).

To allow your other antivirus tool to continue scanning, you need to stop Malwarebytes from registering with Windows. To do this, open the program (double-click its icon in the system tray or search for it in the Start menu), then click settings (cog icon, top right) and select the Security tab. Next, scroll down to the Windows Security Center section and click the slider next to 'Always register Malwarebytes…' - this will now


Premium Trial
Activate license
Settings
General
Notifications
Security
Display
Allow List
Account
About
Advanced

Scan options

Scan for rootkits

Scan within archives

Use artificial intelligence to detect threats (scans may take longer)

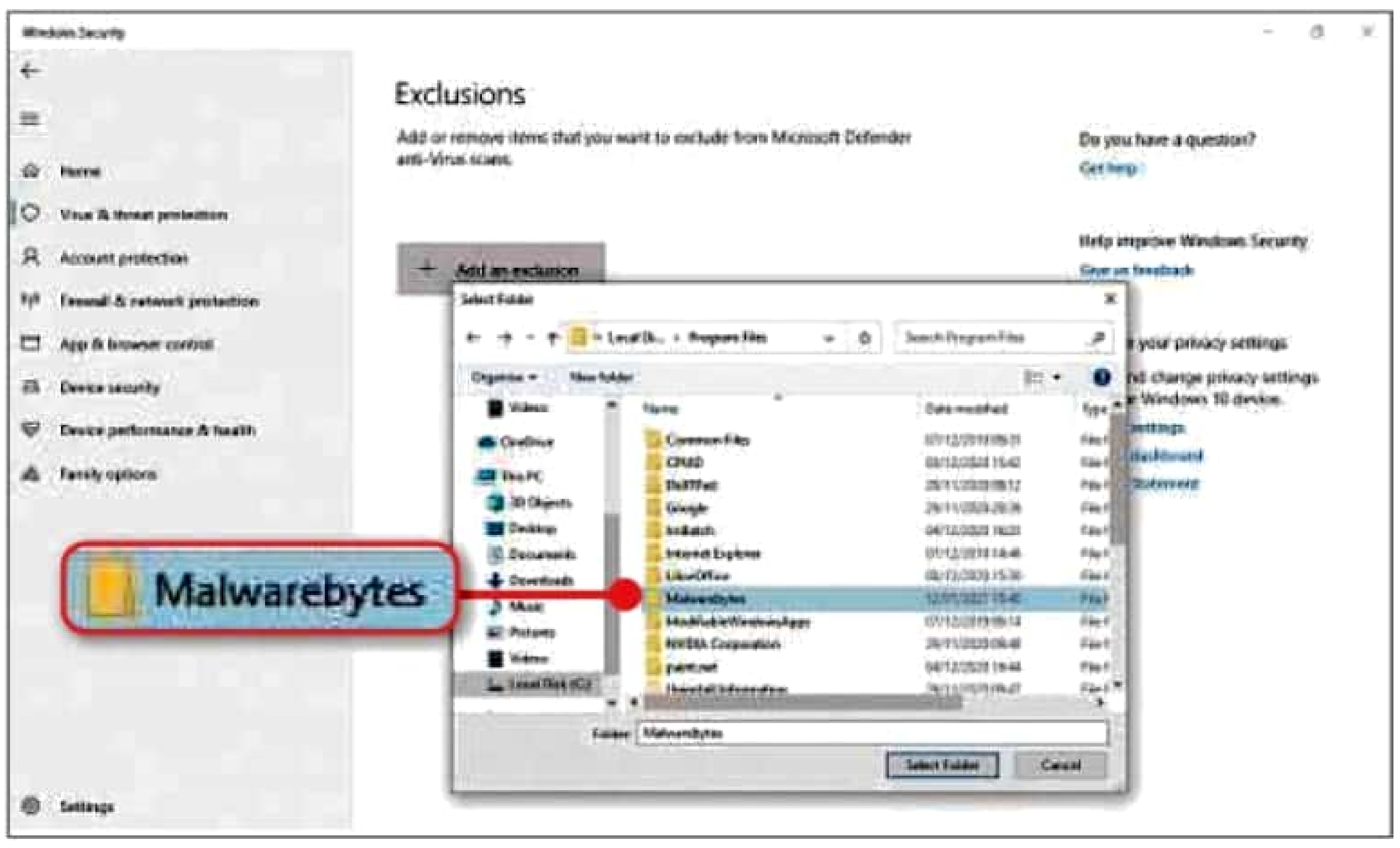
Use expert system algorithms to identify malicious files

Windows Security Center

Always register Malwarebytes in the Windows Security Center

Potentially unwanted items

Turn off this setting so that Malwarebytes can run alongside another antivirus tool


Windows Security
Home
Virus & threat protection
Account protection
Firewall & network protection
App & browser control
Device security
Device performance & health
Family options
Settings
Add an exclusion
Select Folder
Malwarebytes
Select Folder
Cancel

Exclusions

Add or remove items that you want to exclude from Microsoft Defender anti-Virus scans.

Do you have a question?

Get help

Help improve Windows Security

Give us feedback

Folder: Malwarebytes

To avoid conflicts, Defender lets you select folders (in our case Malwarebytes) that will be ignored by antivirus scans

turn grey (see screenshot above). While it will no longer be listed in the 'Virus & threat protection' section, Malwarebytes will now run alongside your other antivirus tool – in our case, Microsoft Defender.

Set up exclusions in Defender

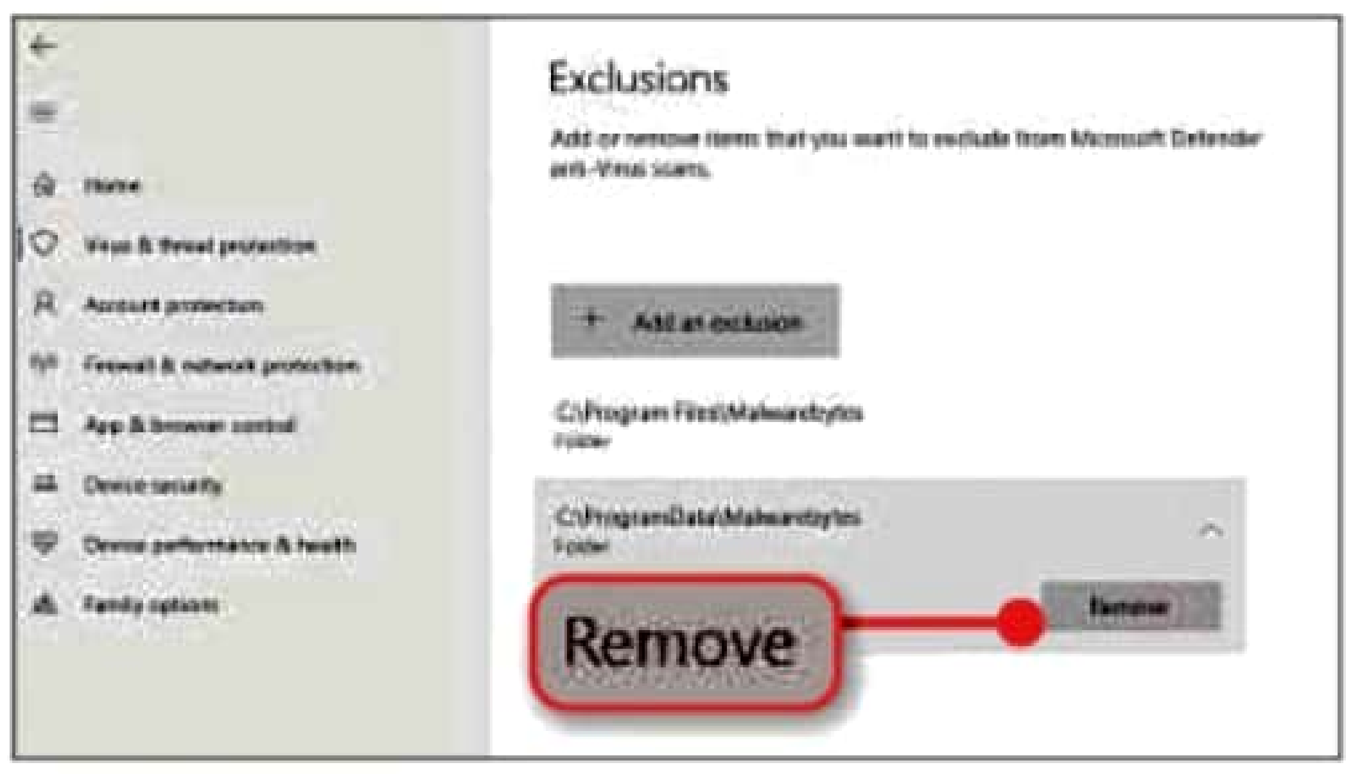
Malwarebytes Premium and Defender will usually work in tandem – we've certainly never had problems running the two. However, if you do notice your PC is running slower than usual or scans are failing to complete, the two tools may be conflicting with one another. To fix this, you need to set up what are known as 'exclusions' – essentially telling your other antivirus tool that Malwarebytes is safe.

Here we'll explain how to exclude Malwarebytes from Microsoft Defender scans, but the process is similar if you're using another antivirus tool – simply look for an Exclusions or Allowed section in its settings section.

If you haven't already, set Malwarebytes so that it doesn't register with Windows Security (as we explained earlier). Next, return to the Windows Security window, click the 'Virus & threat protection' option followed by 'Manage settings', then scroll down to Exclusions and click 'Add or remove exclusions'. From here, select 'Add an exclusion' followed by Folder. Navigate to **C:\Program Files\Malwarebytes** (see screenshot above right), then click OK.

You also need to exclude a second folder, so click the 'Add an exclusions' button again, then navigate to **C:\ProgramData\Malwarebytes** and click OK. You should now see both folders listed as being excluded by Defender. If you still experience problems, you may need to follow the same process to exclude other Malwarebytes files – you can find an up-to-date list of these at www.snipca.com/37113 (look under the 'Add files if needed' section).

If you uninstall Malwarebytes at any time in the future, you can remove these exclusions by returning to the Exclusions window, selecting the relevant file or folder, then clicking Remove (see screenshot below left).


Home
Virus & threat protection
Account protection
Firewall & network protection
App & browser control
Device security
Device performance & health
Family options
Add an exclusion
Remove
Remove

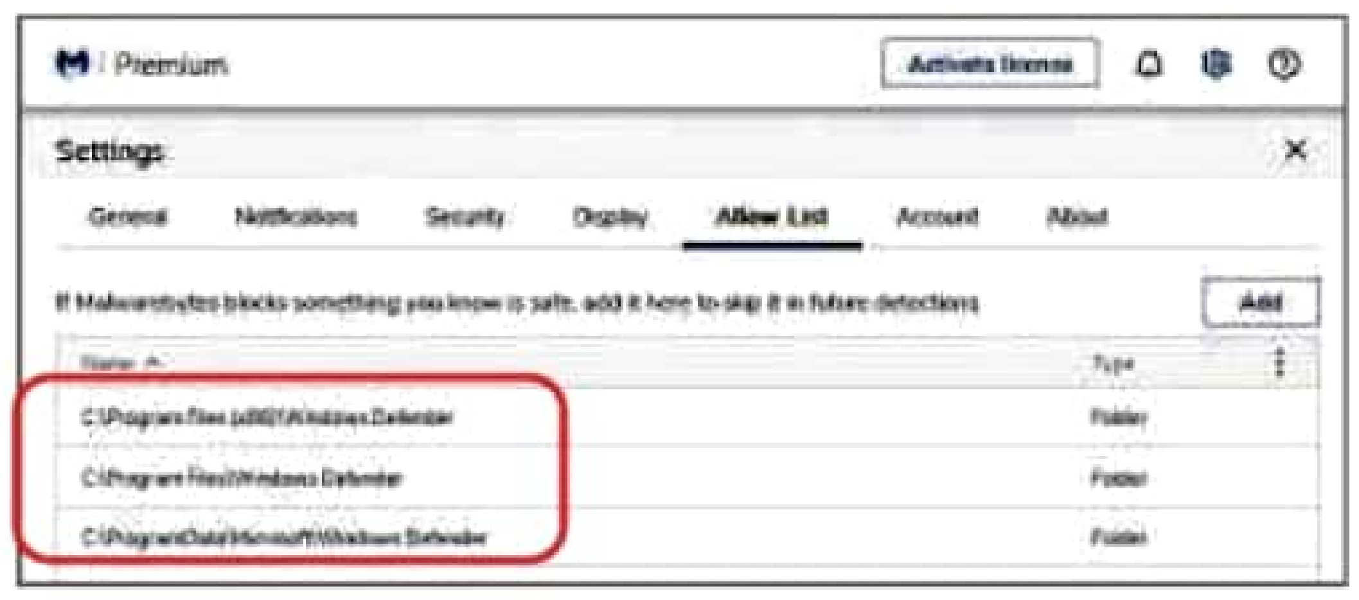
Exclusions

Add or remove items that you want to exclude from Microsoft Defender anti-Virus scans.

C:\Program Files\Malwarebytes
Folder

C:\ProgramData\Malwarebytes
Folder

You can remove any files or folders from Defender's Exclusion list at any time


Premium
Activate license
Settings
General
Notifications
Security
Display
Allow List
Account
About
Add

If Malwarebytes blocks something you know is safe, add it here to skip it in future detections

Name	Type
C:\Program Files (x86)\Windows Defender	Folder
C:\Program Files\Windows Defender	Folder
C:\ProgramData\Microsoft\Windows Defender	Folder

Here we've added the three Defender folders to Malwarebytes' Allow List

Set up exclusions in Malwarebytes

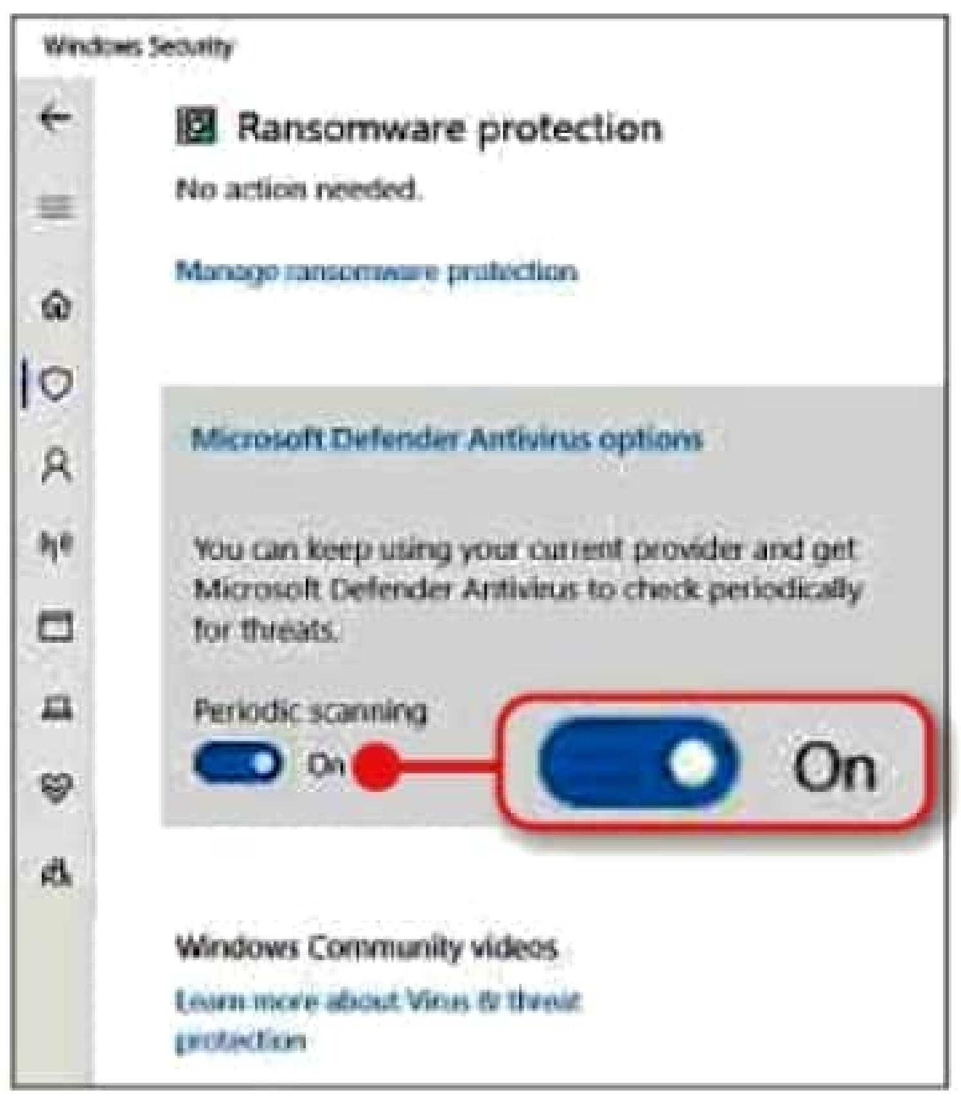
In most cases, the steps we've described so far will let Malwarebytes run alongside a second antivirus tool. However, if you still experience problems with slow scans or conflicts, you can also set up exclusions in Malwarebytes so it knows to trust your other antivirus tool.

Here, we'll explain how to do this with Defender – if you're using another antivirus tool, it will be a case of adding the folder where that tool's files are installed (though it's worth checking the developer's website for any specific folders or files that should be excluded).

Open Malwarebytes, click the cog icon, then the Allow List tab. Next, click Add (top right), followed by 'Allow a file or folder'. In the window that opens, navigate to **C:\Program Files\Windows Defender**, click OK, then Done.

Next repeat this process for two more folders: **C:\Program Files (x86)\Windows Defender** and **C:\ProgramData\Microsoft\Windows Defender**. You should now see all three folders added to the Allow List in Malwarebytes (see screenshot above). Malwarebytes will now ignore files and programs in these folders, allowing Defender to operate normally. **ca**

Get double protection with other AV tools


Windows Security
Manage ransomware protection
Windows Community videos
Learn more about Virus & threat protection

Ransomware protection

No action needed.

Microsoft Defender Antivirus options

You can keep using your current provider and get Microsoft Defender Antivirus to check periodically for threats.

Periodic scanning
On

If you've installed Norton, McAfee, Kaspersky or any other antivirus tool, you can set Microsoft Defender to run occasional scans alongside these tools. To turn this feature on, return to the Windows Security window and select 'Virus & threat protection', then scroll to the bottom and click 'Microsoft Defender Antivirus options'. Click the 'Periodic scanning' slider to turn it on (see screenshot). You can't set a schedule for these periodic scans – Windows decides this for you. However, they will begin only when you're not using your PC, so you won't notice any drop in performance.

Problems Solved

Our experts solve all your tech problems

PROBLEM OF THE FORTNIGHT

Can I recover my old floppies?

Q I have a Windows 10 PC and also two machines running Windows XP. Neither of the two old computers are connected to the internet. With these older PCs I produced many floppy disks as storage, but they're now not in regular use. I would like to commit the contents of these disks to an archive, so I purchased a USB floppy drive to do the job. However, all three machines report that the disks have errors, suggesting that they need to be reformatted. My question therefore is will reformatting a floppy remove the contents? If the answer is yes, how might I otherwise retrieve the information?

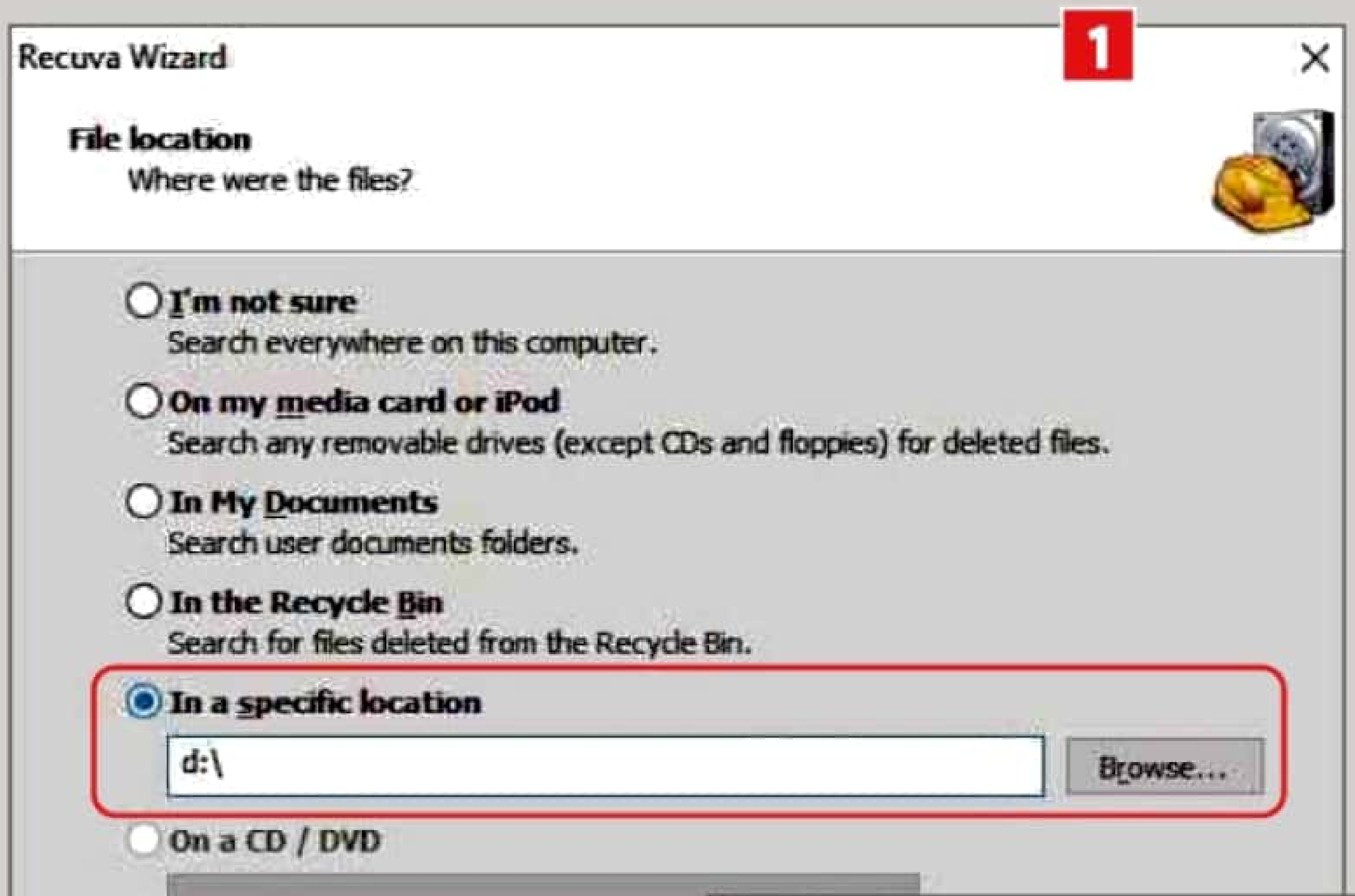
J M Stewart Clark

A Yes, formatting a disk would have the effect of wiping its contents, at least at the surface level, so that is very much the last thing you want to do!

We don't know how many disks you have, but if they're all producing errors when you try to access them then it suggests they've all suffered the same fate. It could be warping through cycles of heat and cool while in storage, prolonged exposure to magnetism or just good old-fashioned physical deterioration – because floppy disks simply don't last forever.

As such, we have to be honest and say that we don't hold out much hope that you'll get anything off this ancient storage media. However, there are a couple of things you can try.

In the first instance, try Recuva, which is a free download from www.snipca.com/36921. Click 'All files' followed by Next, and then 'In a specific location' (see screenshot 1), followed by Browse. Now choose your USB floppy drive and click Next. Tick 'Enable Deep Scan' 2 followed by Start. If Recuva finds any files, it'll display them as a list. Entries marked with a green dot are recoverable, so click to tick the ones you want and then click Recover. Now choose a destination for the recovered files and click OK.



Recuva Wizard

File location
Where were the files?

○ I'm not sure
Search everywhere on this computer.

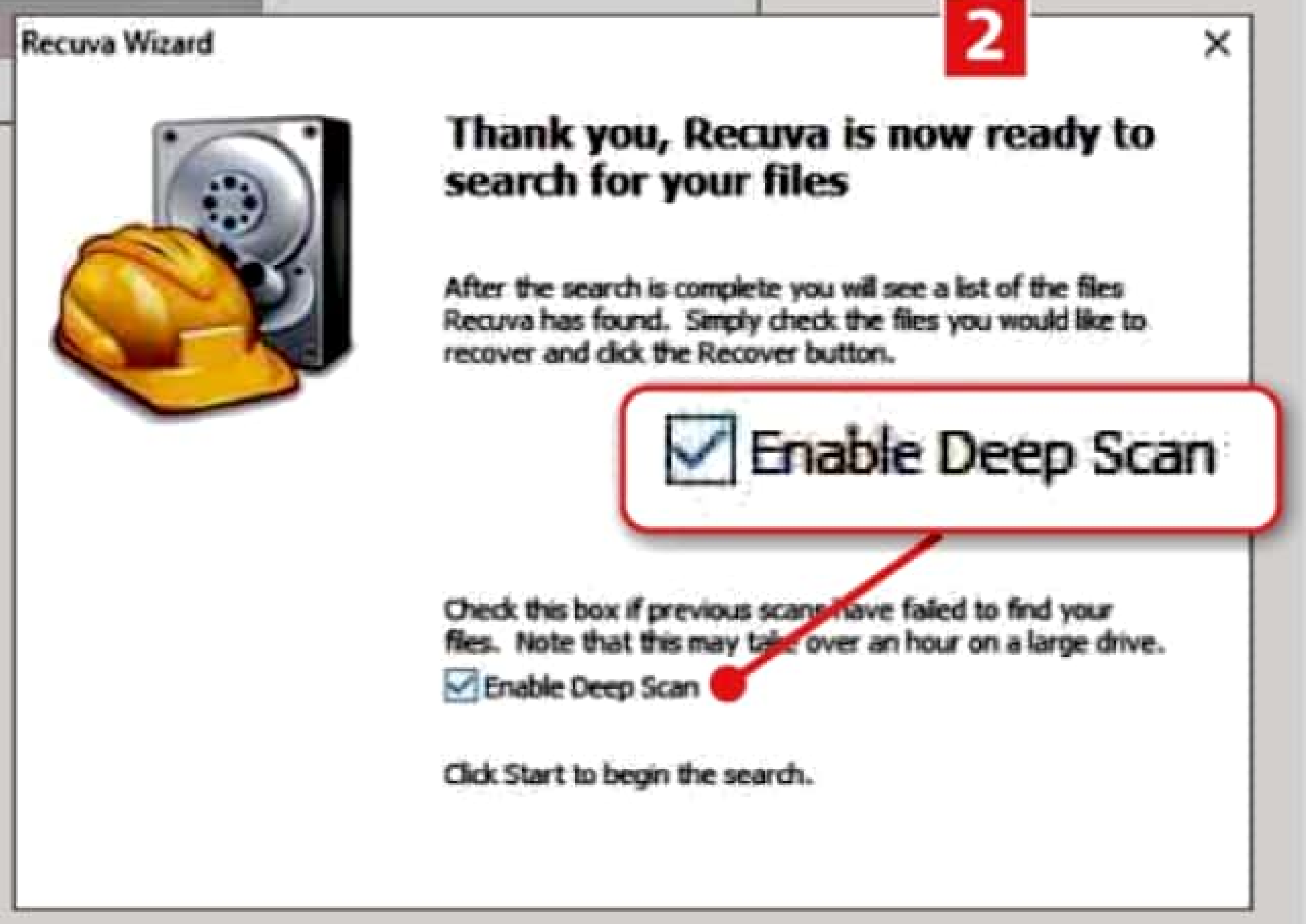
○ On my media card or iPod
Search any removable drives (except CDs and floppies) for deleted files.

○ In My Documents
Search user documents folders.

○ In the Recycle Bin
Search for files deleted from the Recycle Bin.

● In a specific location
d:\

○ On a CD / DVD



Recuva Wizard

Thank you, Recuva is now ready to search for your files

After the search is complete you will see a list of the files Recuva has found. Simply check the files you would like to recover and click the Recover button.

☑ Enable Deep Scan

Check this box if previous scans have failed to find your files. Note that this may take over an hour on a large drive.

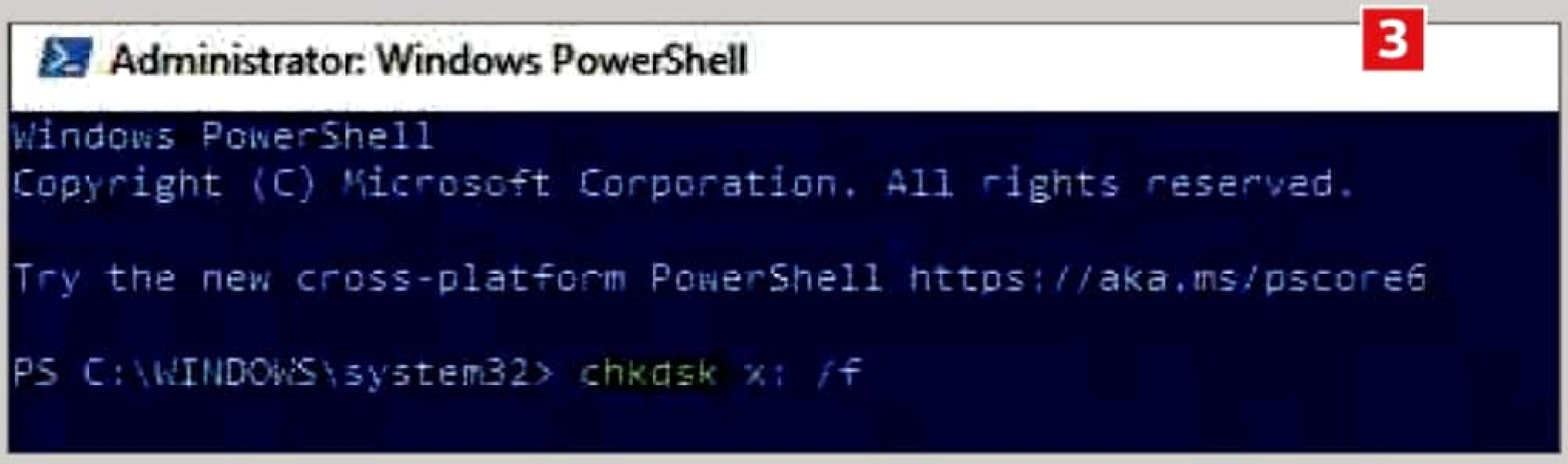
☑ Enable Deep Scan

Click Start to begin the search.

In Recuva, select 'In a specific location', followed by 'Browse...' 1. Once you've selected your USB floppy drive, click to tick 'Enable Deep Scan' 2

If this doesn't work then there's an old DOS command that might help. Called chkdsk (short for 'Check Disk'), it checks specified disks for problems and, with the appropriate parameters after the command, attempts to fix any that it finds.

You can execute the chkdsk command from Windows 10, within a PowerShell window. To do this, first press Windows key+X to open Windows 10's Quick Link menu, then click 'PowerShell (Admin)'. Next, at the PowerShell command prompt, type chkdsk x: /f 3 and press Enter. Note that the x: needs to reflect your USB floppy disk drive's letter. So, if Windows has assigned it the drive letter D, say, then the command you actually need to type is chkdsk d: /f before pressing Enter.



Administrator: Windows PowerShell

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\WINDOWS\system32> chkdsk x: /f
```

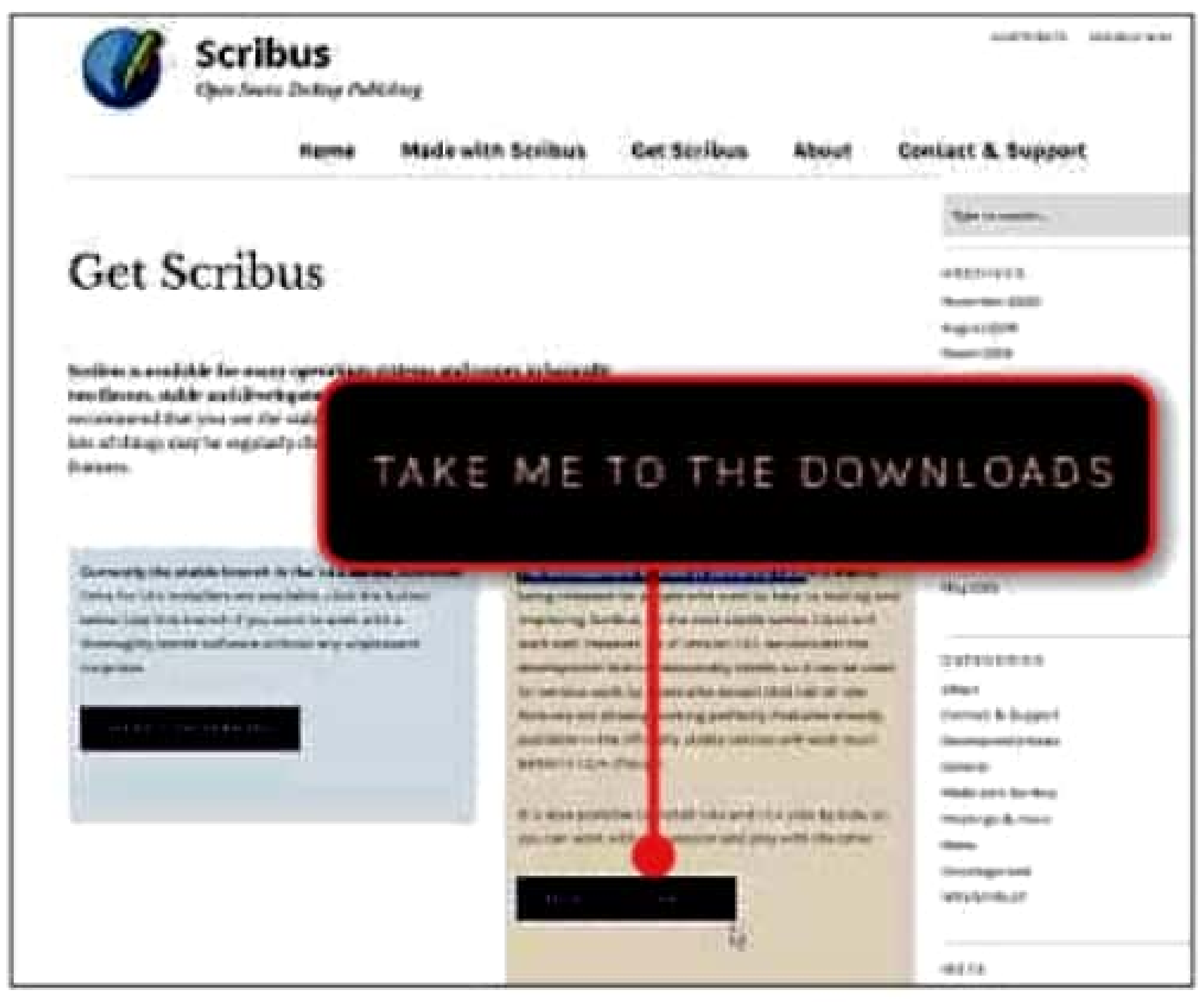
To execute the 'Check Disk' command, type chkdsk x: /f in PowerShell

It'll take chkdsk a few minutes to scan each disk, and it'll issue a report at the end of what it has (or has not) done. Finally, try accessing the disk in File Explorer to see if any files are visible. If not, try running Recuva again – as chkdsk might at least have done enough to make the files recoverable through that program.

Should I ditch Microsoft Publisher for my newsletters?

Q I run the European Honeypot Collectors' Society. For the past 22 years, I've been using various versions of Microsoft Publisher (in chronological release order) to create a monthly newsletter. I currently have Microsoft Office 2010, but only use Publisher. Are there any similar publishing programs I can use that will still allow me to open existing documents, and with the capability of also generating PDF copies? If so, should I then remove Office 2010 completely?

John Doyle



The development version of Scribus will open existing Publisher 2010 documents

A We assume you're worried about the security of Office 2010? That's sensible, but do remember that Publisher 2010 won't stop working any time soon. Moreover, even though support has now officially ended, we'd be surprised if Microsoft didn't issue fixes for any serious flaws that are found in the next couple of years: millions of people still rely on Office 2010 and there are plenty of examples of Microsoft releasing security updates for popular tools long after officially switching off support.

Beyond that, there are various free alternatives to Publisher – but none without a sting in the tail. The most popular is Scribus (www.scribus.net/downloads). This will allow you to achieve pretty much everything you can in Publisher, including the ability to export documents as PDF files. However, the problem is that the 'stable' release version (1.4.x) does not support the importing of Publisher files – so it won't be possible to open your existing documents.

The so-called 'Scribus development branch' (version 1.5.x, at the time of print) does have this ability. The downside is that this version might be unreliable, and could change at any time. As such, there's no guarantee the Publisher-import facility will work well, or even that it'll remain in later versions. If you're OK with that, then click the right-hand TAKE ME TO THE DOWNLOADS button rather than the left one (see screenshot).

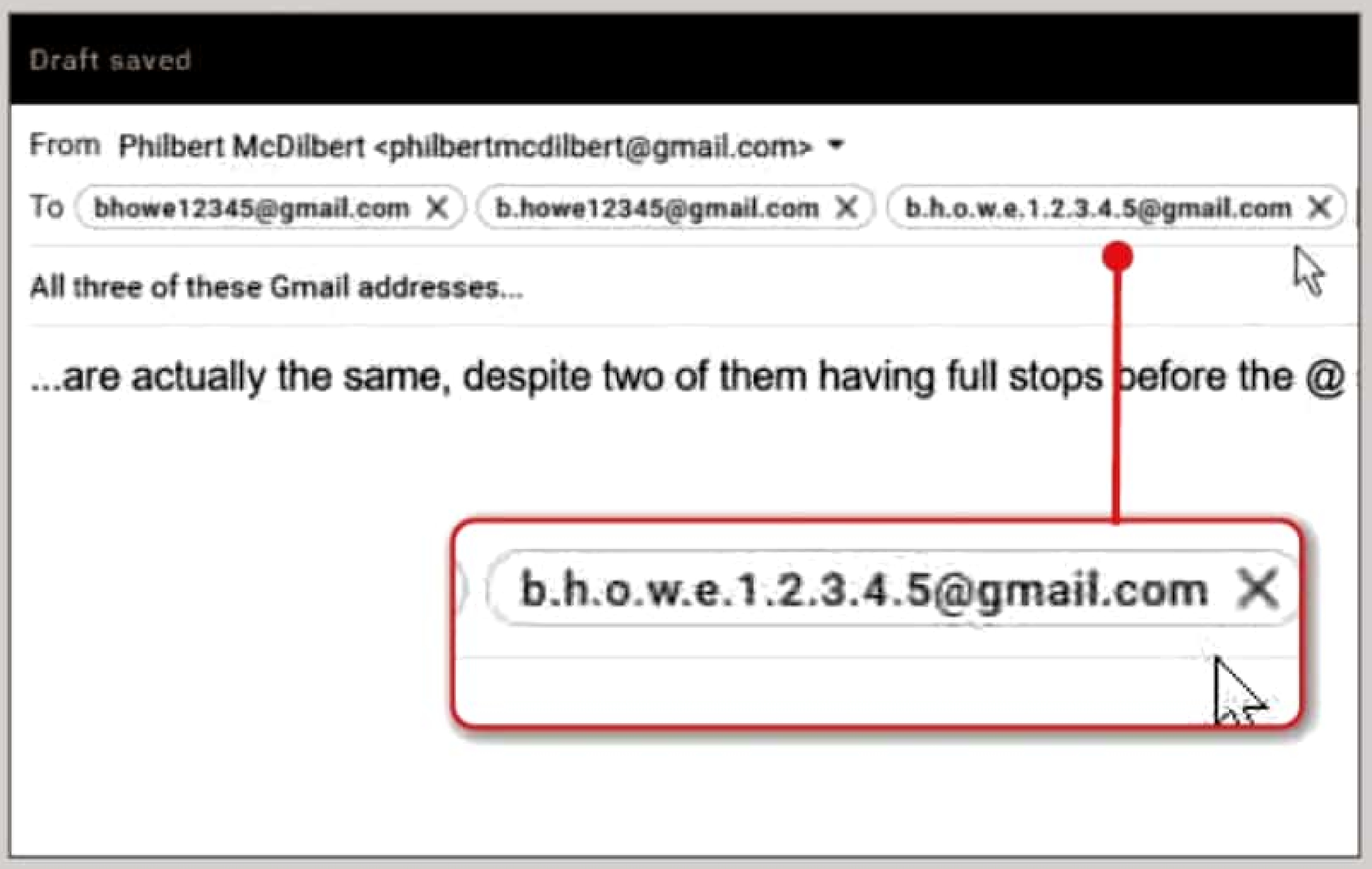
Finally, we should say that you could just buy the latest version of Publisher, if that's all you need – saving you the cost of a full-blown version of the Office suite (or Microsoft 365 as it's now known).

Microsoft currently charges £109.99 for this, and you'd be guaranteed compatibility with all your old files, so you can just carry on as before. To purchase it direct from Microsoft, visit www.snipca.com/36912.

How do I stop the other Brenda's emails?

Q I've been having problems with an email address that's very similar to my own. It's exactly the same apart from the first dot, which is missing in the other address. The owner lives in the USA and has been purchasing craft materials, but I keep getting her emails. I've tried explaining to the companies but nothing happens, so all I am able to do is unsubscribe. I've tried emailing this other person but the emails come back to me, as the address is so similar. Can you advise me on what I can do?

Brenda Howe



Draft saved

From Philbert McDilbert <philbertmcdilbert@gmail.com>

To bhowe12345@gmail.com b.howe12345@gmail.com b.h.o.w.e.1.2.3.4.5@gmail.com

All three of these Gmail addresses...

...are actually the same, despite two of them having full stops before the @

b.h.o.w.e.1.2.3.4.5@gmail.com

Gmail ignores the full stops in email addresses

A There is no other 'Brenda' here. Gmail, the service you're using, ignores full stops (periods) in email addresses. So, without revealing your real address, b.howe12345@gmail.com is actually the same address as bhowe12345@gmail.com. This is why your attempts to email the 'other' Brenda result in the messages returning to your inbox: the two email address are the same. So too would be b.h.o.w.e.1.2.3.4.5@gmail.com (feel free to try that example, with your real email address).

Now, while it's possible that some person has maliciously or randomly typed in your email address into a bunch of American crafting websites, it's much more likely that this is just regular spam. As such, there's nothing much that can be done.

However, do click the Spam button in Gmail, rather than any unsubscribe links – because all too often those are just bait that tell the spammers your email address is active.

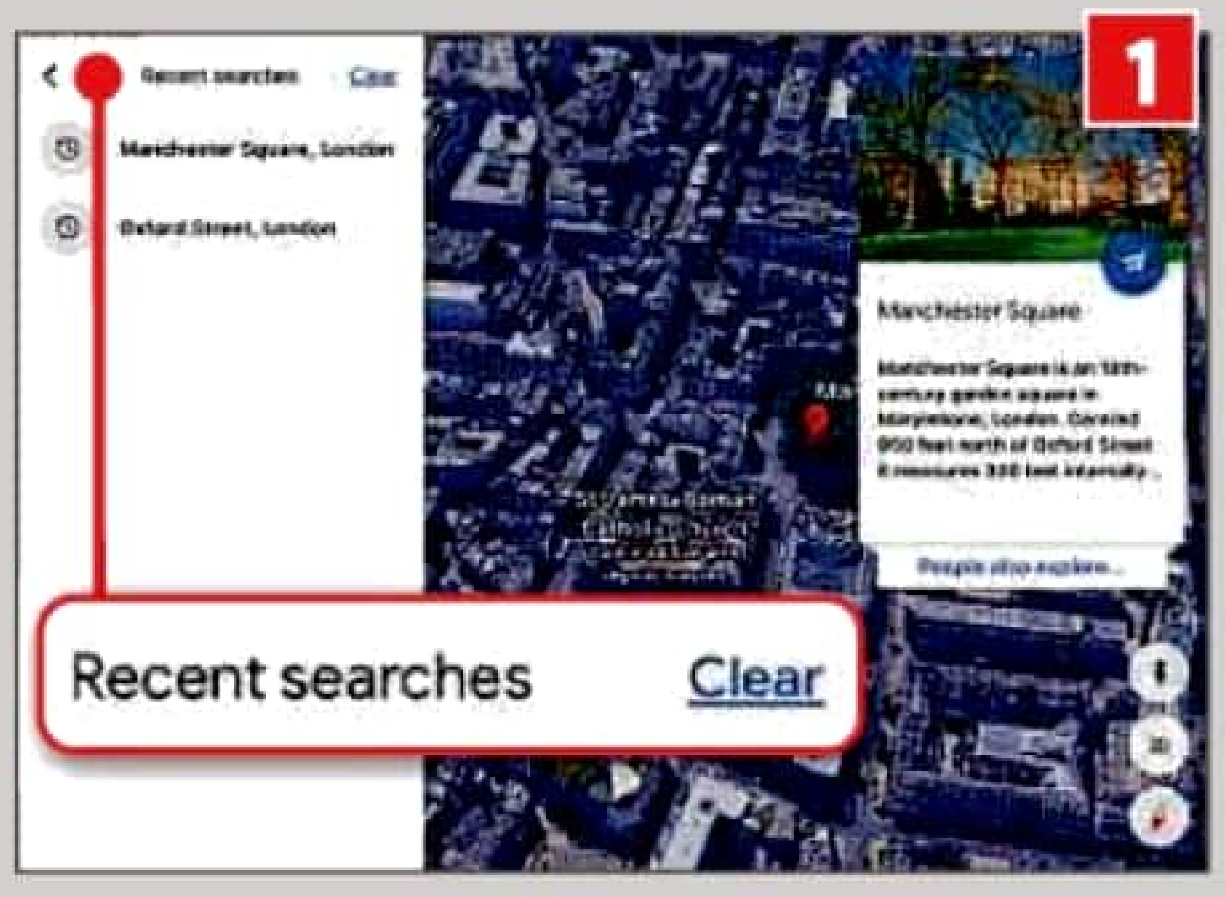
Can I restore cleared Google Earth history?

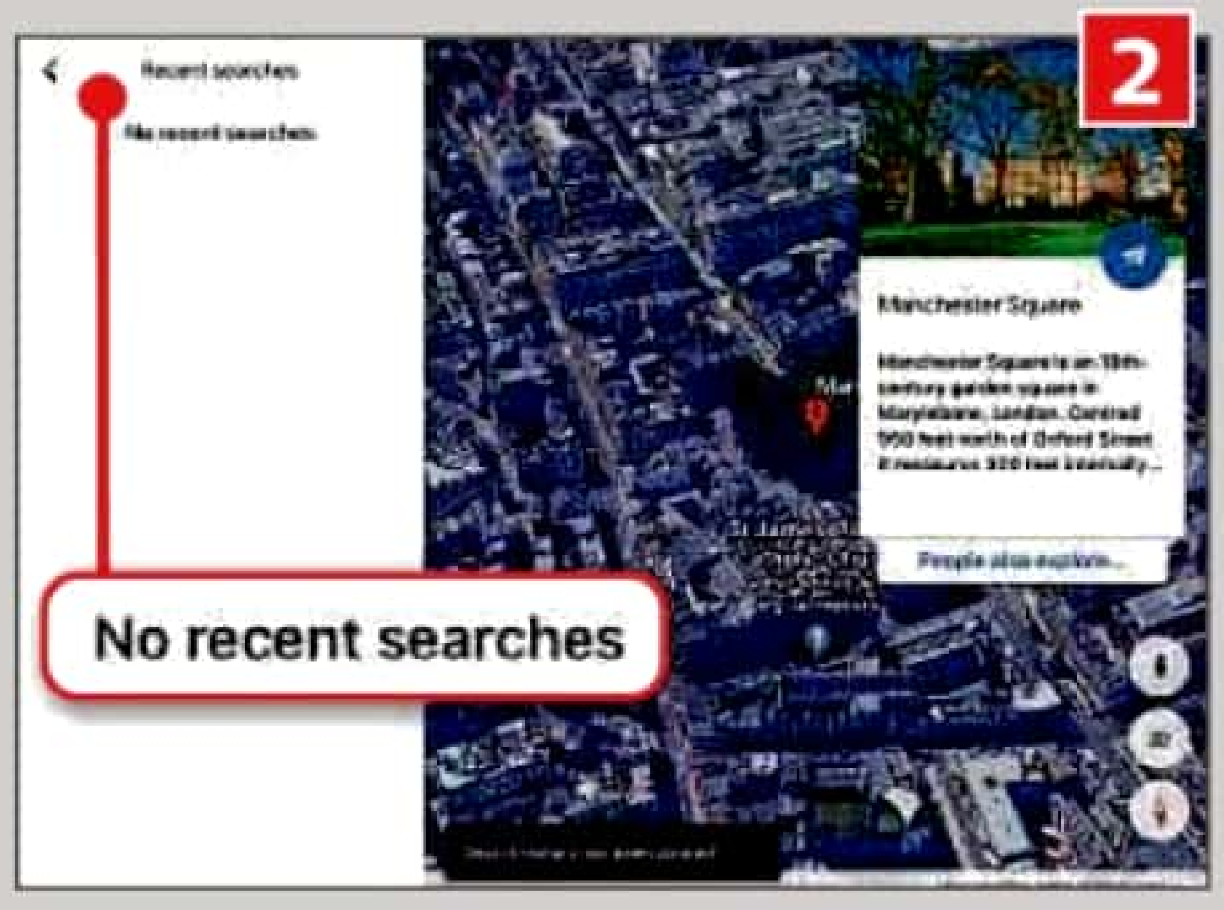
Q Google Earth is my wife's favourite application on her iPad. She uses it to explore places of times gone by, and had built up a long list of addresses. Unfortunately, in error she tapped the Clear button and now all these addresses have gone. Is there any way of restoring or recovering them?

Ian McArthur

A It's rare that we have to reply with a flat no, but here we're afraid it really is a flat no. While there is, potentially at least, a way to recover these addresses on a Windows PC or Apple Mac computer, tapping the Clear option on the iPad version of the app instantly wipes everything – for good.

Given this fact, we consider it a significant failure of the app's design that there isn't at least a requirement to confirm the action to clear the search history – but there isn't, and that's that. So, we're publishing your question both to deliver this bad news to you, but also as a warning to other iPad-owning Google Earth fans to use the app carefully.


1
Recent searches
Clear
Manchester Square, London
Oxford Street, London
Manchester Square


2
Recent searches
No recent searches
Manchester Square

Clearing recent searches from Google Earth on an iPad **1** can't be reversed **2**

How do I pour coffee on this intruder?

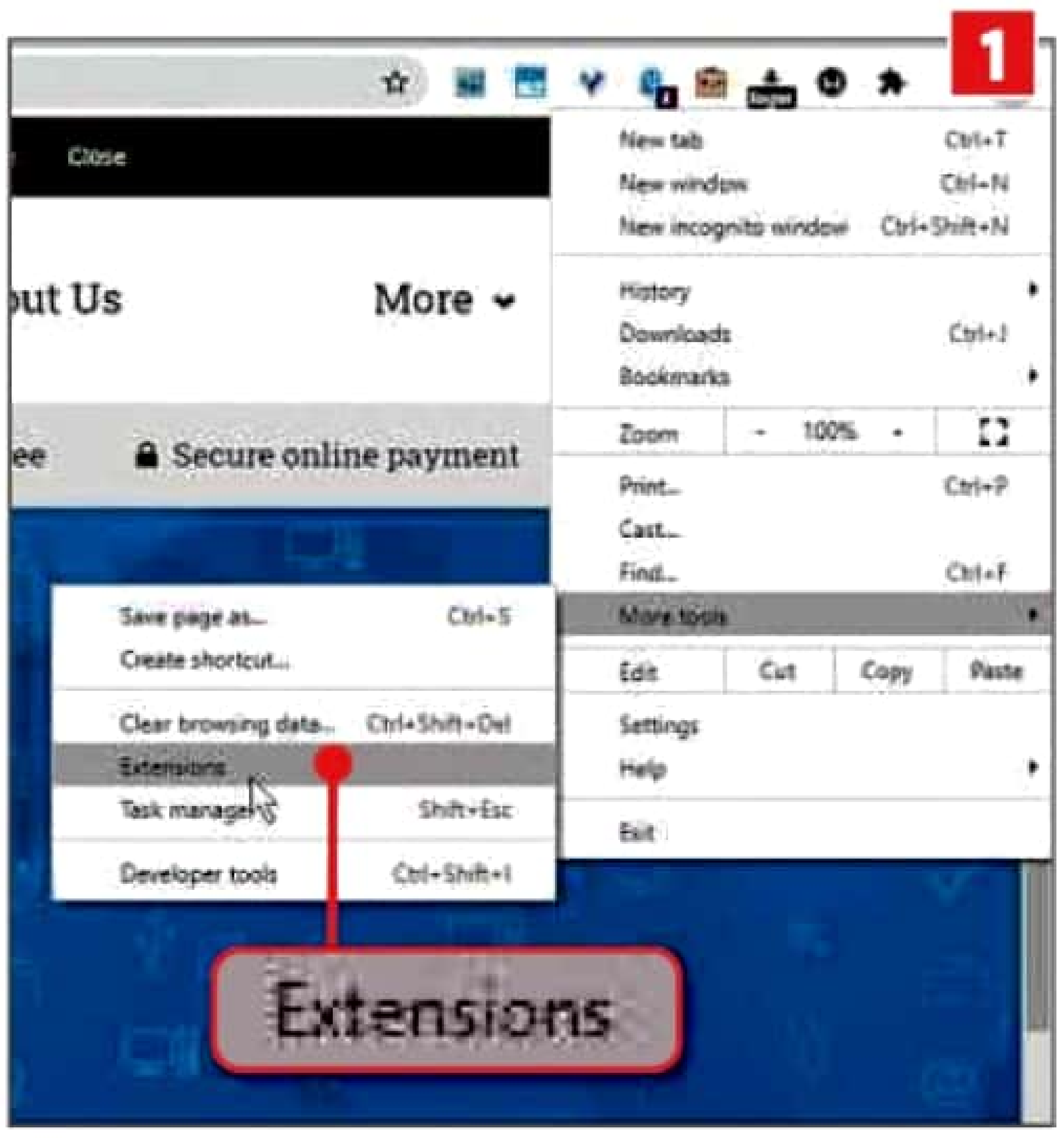
Q For months I've been regularly bothered by Leo Nagano's 'Buy Me a Coffee' page, at www.buymeacoffee.com/leonagano, in both Chrome and Edge. It even appears in Kaspersky Protected Browser, suggesting it's quite deeply embedded. On the page, this chap pretends to be apologetic, and suggests removing the NoDisguisedAdsAnymore extension. I'm sure that will make a difference! I've run a full scan with Kaspersky and it doesn't find anything. Can you suggest any way of exterminating this little vermin?

David Sinden

A We don't think this is malicious. NoDisguisedAdsAnymore relates to a little-known browser extension developed by this Leo chap. It seems to have been built with good intentions but was evidently a bit broken and Leo gave up on it.

As such, when installed instances of the extension go wrong, they link to Leo's 'Buy Me a Coffee' web page, where he explains that his abandoned tool is problematic and how to uninstall it.

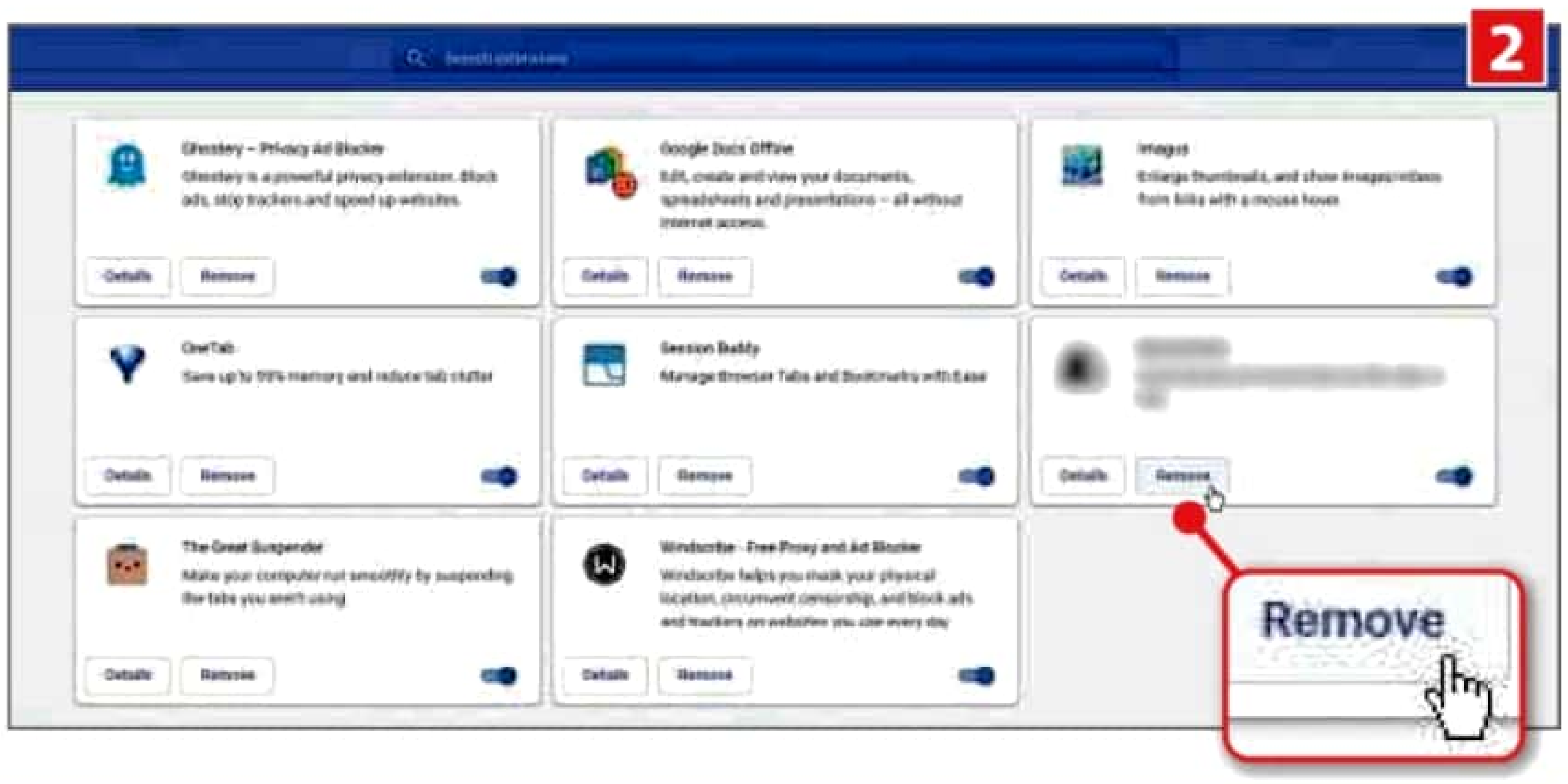
We don't know how, when or why you installed NoDisguisedAdsAnymore but, as it's for Chrome, it would also automatically sync to the new Chromium-based Edge, if you have synchronisation enabled (as seems likely). The reason it also appears in Kaspersky Protected Browser is because this too is just an extension that runs in Chrome (and/or Edge).


1
Close
out Us
More
Secure online payment
New tab Ctrl+T
New window Ctrl+N
New incognito window Ctrl+Shift+N
History
Downloads Ctrl+J
Bookmarks
Zoom - 100% +
Print... Ctrl+P
Cast...
Find... Ctrl+F
More tools
Edit Cut Copy Paste
Settings
Help
Exit
Save page as... Ctrl+S
Create shortcut...
Clear browsing data... Ctrl+Shift+Del
Extensions
Task manager Shift+Esc
Developer tools Ctrl+Shift+I
Extensions

To remove NoDisguisedAdsAnymore, go to Extensions in the Chrome menu...

So, that's all there is to it: an old and misfiring extension that needs removing. To do that, first open the Chrome menu (three dots, top right), then click 'More tools' followed by Extensions (see screenshot **1**). Now find the NoDisguisedAdsAnymore entry and click Remove **2**, then confirm by clicking Remove again. This removal action should sync to your Edge browser but, if you've since disabled synchronisation, then in Edge open the menu (three dots, top right) then click Extensions and then the relevant Remove link.

...then find the extension and click 'Remove'


2
Ghostery – Privacy Ad Blocker
Google Docs Offline
Imagus
OneTab
Session Buddy
The Great Suspender
Windscribe - Free Proxy and Ad Blocker
Details
Remove
Remove

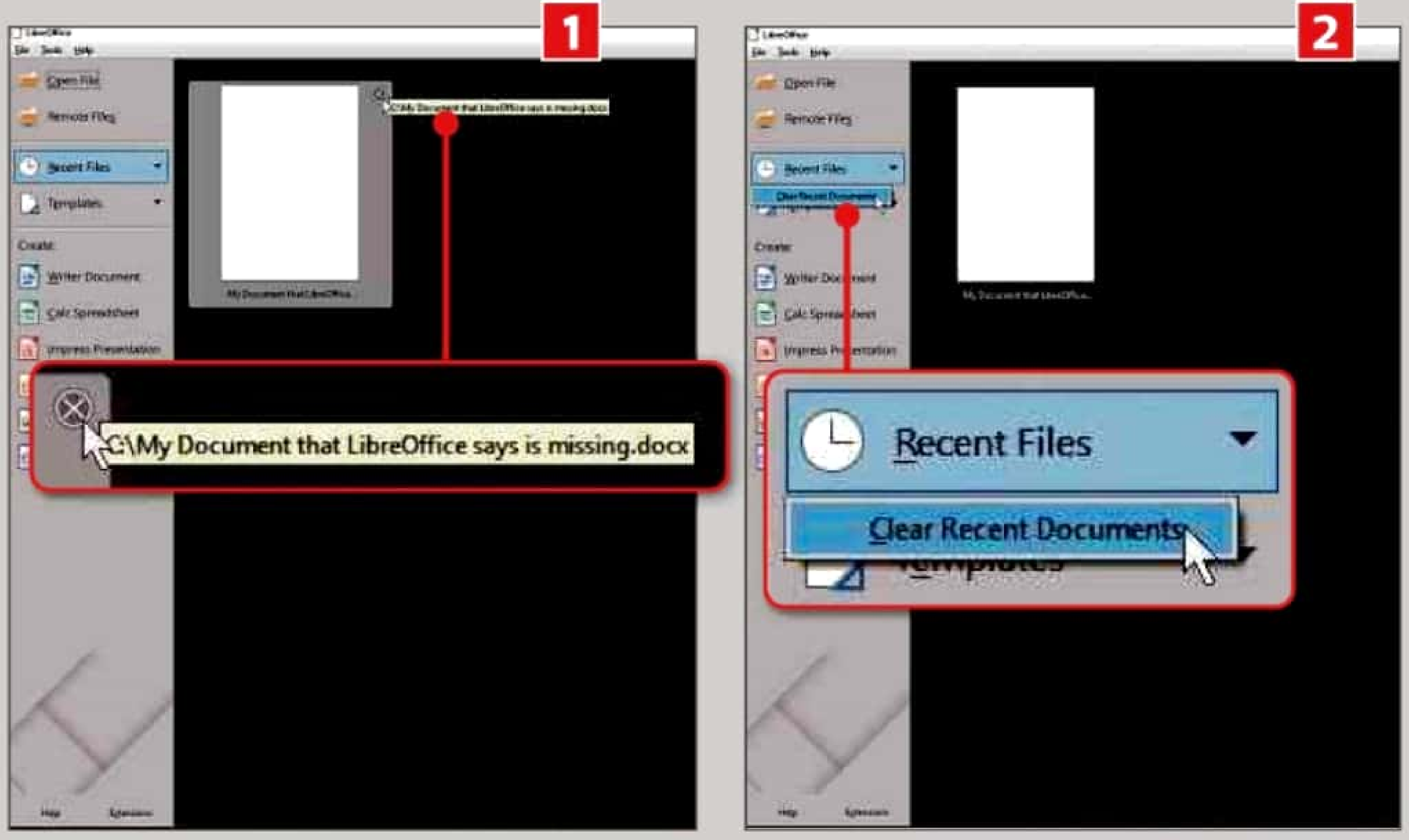
BROWSE, SEARCH AND PRINT ISSUES 570–595
active
2020
BACK ISSUE CD
26

Q: Is BBC iPlayer being ageist?

A: Issue 561, page 66 – find it on our 2020 Back Issue CD

Buy it from www.snipca.com/37026

Why can't I open my LibreOffice documents?


1
C:\My Document that LibreOffice says is missing.docx
2
Recent Files
Clear Recent Documents

To clear 'orphaned' shortcuts click the cross 1 or select 'Clear Recent Documents' 2

Q When I try to open some of my documents, which I have in LibreOffice,they tell me they don't exist. However, I've opened them previously many times. All other documents are fine. Can you help?

Brian Butler

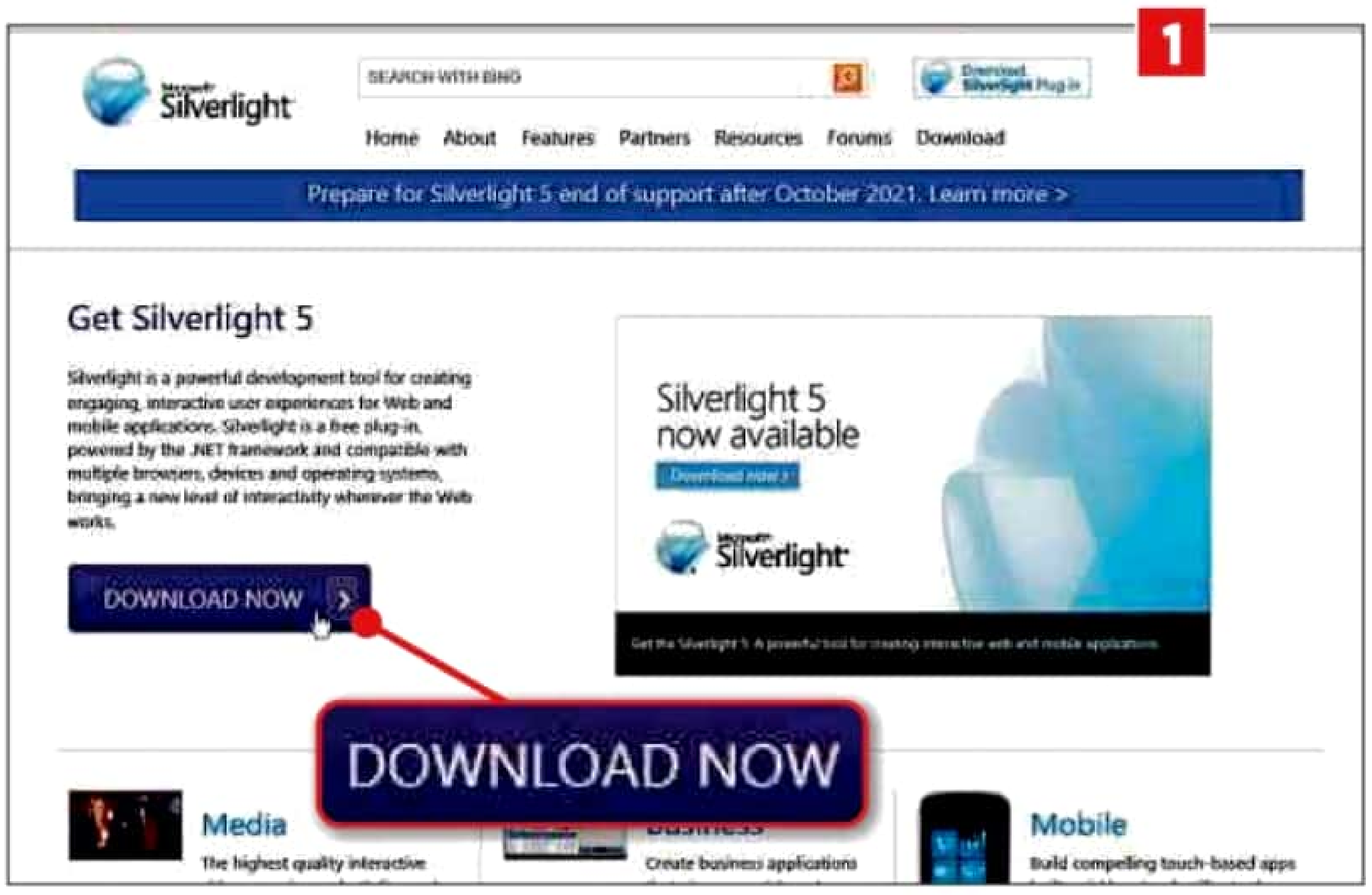
A The way you phrased your question, stating that you have documents 'in' LibreOffice, makes us suspect you're using its Quick Launcher tool to open documents. This is accessed either by using the Control (Ctrl)+W shortcut to close a document or, manually, via the LibreOffice program group in the Start menu.

There's nothing wrong with working this way, but documents displayed on the Quick Launcher screen are not 'in' LibreOffice. Instead, they're links to the last-known locations of documents that have been opened in one of the LibreOffice apps in the past.

However, if you later move those documents elsewhere, perhaps using File Explorer to organise them into folders, then LibreOffice Quick Launcher will have no idea that they've moved. As such, clicking a Quick Launcher thumbnail relating to a moved document will result in a 'file not found' message.

The answer is to open the document directly, wherever it is stored on your hard drive, by double-clicking its file in File Explorer. This will create a new shortcut thumbnail in Quick Launcher. You can clear these 'orphaned' shortcuts by clicking the cross at the top right of their thumbnail (see screenshot 1), or do a clean sweep by clicking Recent Files and then Clear Recent Documents 2.

How do I get Silverlight to work?


1
Silverlight
SEARCH WITH BING
Home About Features Partners Resources Forums Download
Get Silverlight 5
DOWNLOAD NOW
Silverlight 5 now available
Download now
DOWNLOAD NOW
Media
Business
Mobile

Prepare for Silverlight 5 end of support after October 2021. Learn more >

Silverlight is a powerful development tool for creating engaging, interactive user experiences for Web and mobile applications. Silverlight is a free plug-in, powered by the .NET framework and compatible with multiple browsers, devices and operating systems, bringing a new level of interactivity wherever the Web works.

You can download Silverlight from Microsoft (left) and install it (below), but it only runs in Internet Explorer 10 and 11

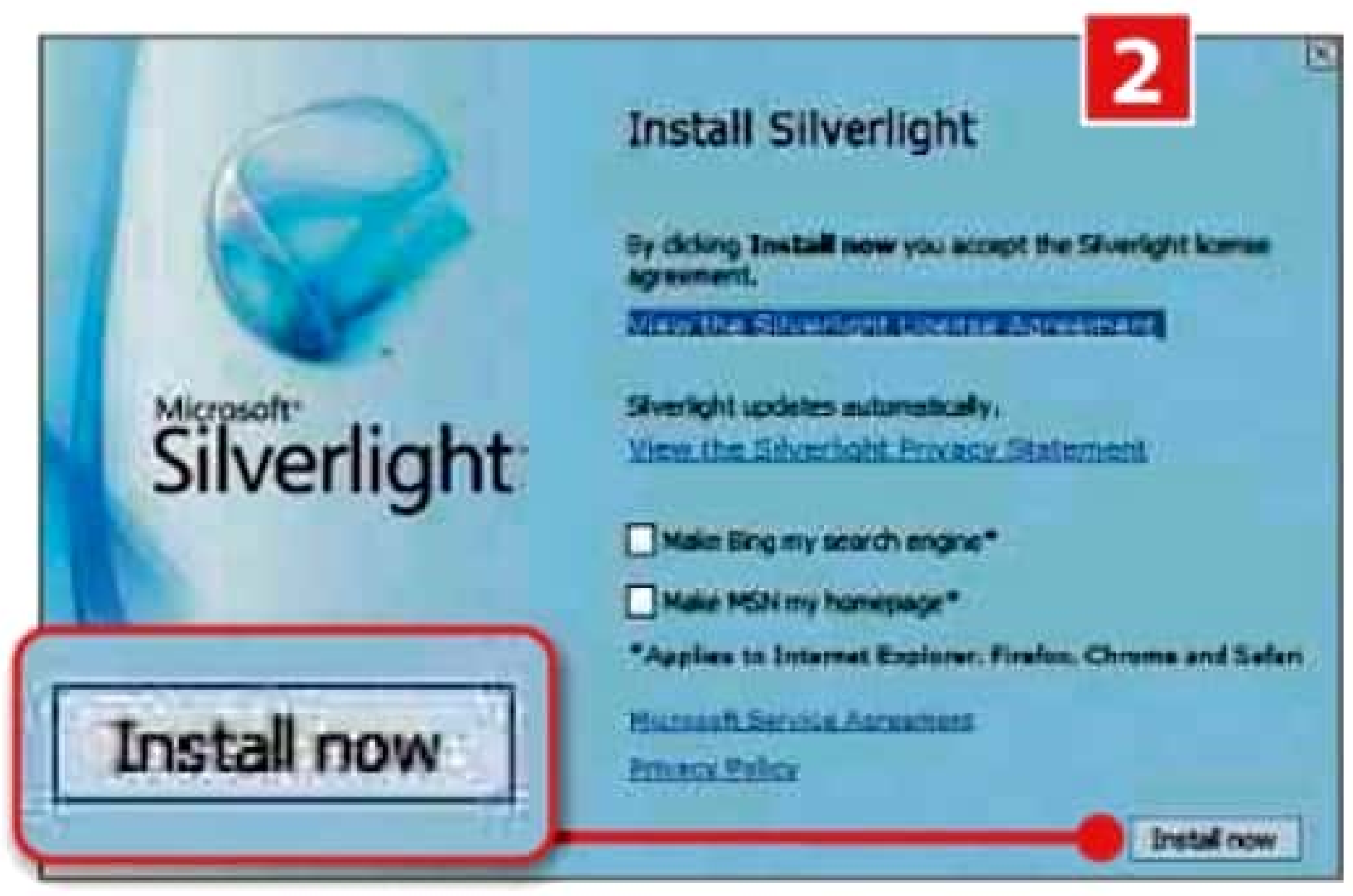
Q I'm an avid amateur genealogist and desperately need the Microsoft Silverlight plug-in to work in order to access a service I hope will fill holes in my family tree. I mainly use Chrome but when I first tried to get Silverlight working it informed me it does not work in this browser. This message has disappeared now, but the Silverlight content does not run. I've also tried it on Edge without any success.

Dr Uwe Hutter

A Microsoft stopped developing Silverlight a couple of years ago. Most other browser developers, including Google, duly wrote it off – which is why it won't work in Chrome.

However, Silverlight – a plug-in for adding video, graphics and animations into web pages – is still supported by Microsoft, and will be until October 2021. Until that time, Silverlight remains available for download and Microsoft will continue issuing fixes for any problems.

However, Silverlight now runs only in Internet Explorer (IE) 10 and 11, and IE11 is part of Windows 10. To launch it, click start, type internet explorer and then click Internet Explorer. Now download Silverlight from www.microsoft.com/silverlight (see screenshot 1) and install 2.


2
Install Silverlight
Microsoft Silverlight
View the Silverlight License Agreement
View the Silverlight Privacy Statement
Microsoft Service Agreement
Privacy Policy
Install now
Install now

By clicking **Install now** you accept the Silverlight license agreement.

Silverlight updates automatically.

☐ Make Bing my search engine*

☐ Make MSN my homepage*

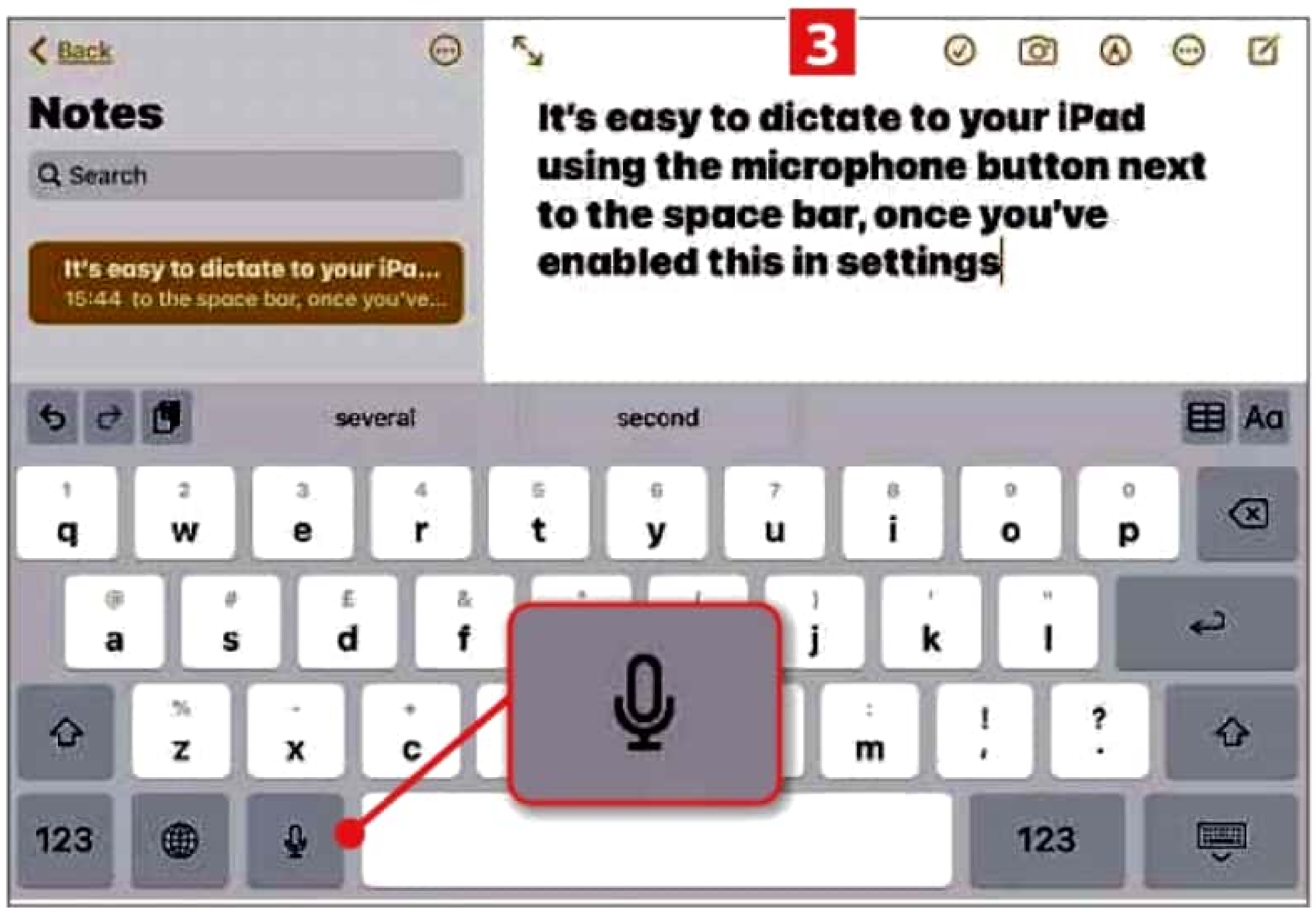
*Applies to Internet Explorer, Firefox, Chrome and Safari

Your Silverlight-based website should now work fine, but only in IE11. Indeed, it'll continue to do so even after Microsoft ends support later this year. However, we wouldn't be recommend using it after this time, as Silverlight will only ever become less safe to use – so do what you need sooner rather than later.

How can my mum dictate to an iPad?

Q My dear mum is now 90 and on her own, having lost my dad. We've got her interested in writing her life story but there are numerous things to overcome, including her limited sight. I showed her how easy my iPhone is to use but it's just too small. Does the iPad offer voice or speech recognition?

Phil King



It's easy to dictate to your iPad using the microphone button next to the space bar, once you've enabled this in settings

It's easy to dictate to your iPa...
15:44 to the space bar, once you've...

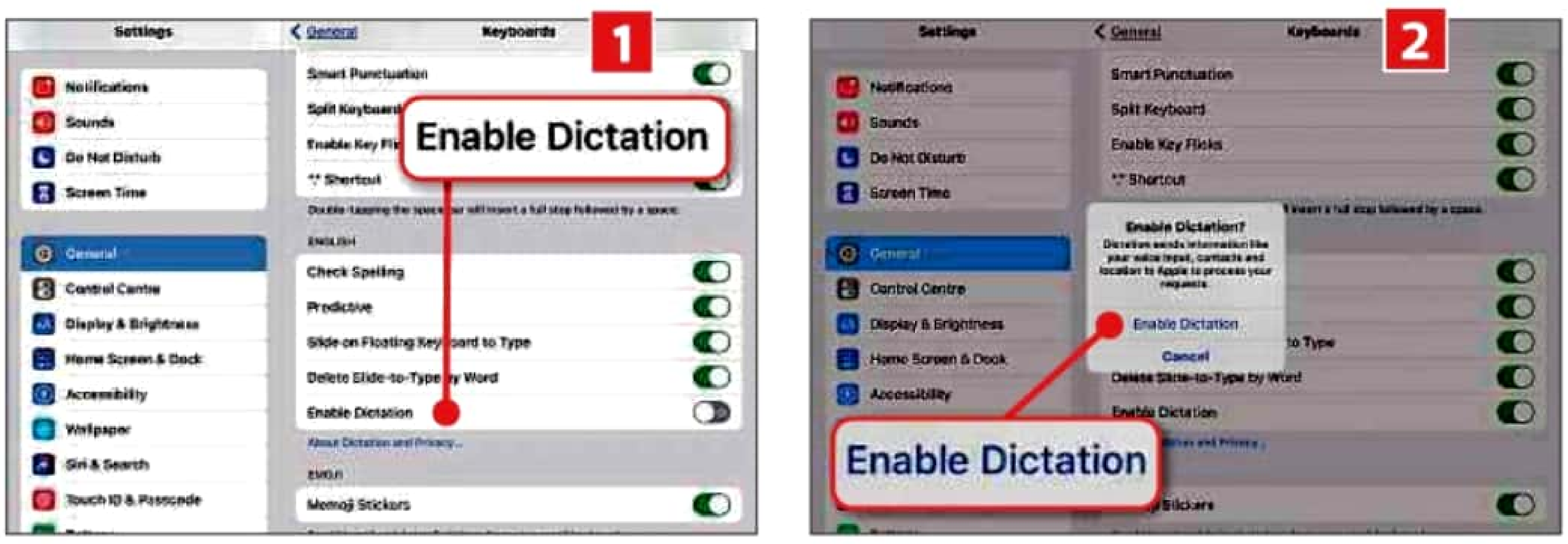
Tap the microphone icon to tell the iPad to listen and take a dictation

A The iPhone and iPad have extensive accessibility features, including speech-recognition and dictation facilities – both of which are very good.

There are too many tools to list here, but you can use your iPhone to explore them, as most are also available on the iPad. Just launch Settings, then tap Accessibility. You can, for example, make all the text bigger, trigger a magnifier tool to zoom into certain parts of the screen and even enable voice controls instead of touch.

As for dictation, this just needs activating in Settings. Tap 'General' followed by Keyboard, then Enable Dictation (and then tap Enable Dictation again, to confirm, see screenshots **1** and **2**). Once done, a microphone icon will appear on the keyboard, just to the left of the space bar **3**. Tapping this tells the iPad to listen to whatever is said. It then performs a real-time (live) transcription to turn into text, which is automatically 'typed' into whatever app is open.

So, with all these options we have no doubt that you'd be able to set up an iPad to allow your mum to achieve what she wants.



In Settings, Keyboards, turn on 'Enable Dictation' and then tap it in the next window to confirm

What's happening to my unused printer ink?

Q **I run a Canon TS8251 printer, that I use almost exclusively for monochrome printing. However, the printer will not print at all if even one colour is out – and my yellow is out, with the cyan also showing low. Where is all the ink going?**

Don Gibb

A Without knowing the details of how and when you print, it's hard for us to say. However, if you've had the printer for a while then a likely cause is evaporation. This wouldn't happen over days or weeks, but certainly over months or years an opened ink cartridge will eventually dry out – even if you never use so much as a drop of ink for printing.

Also, if you're in the habit of switching off your printer at night, say, then this could be a significant contributing factor. Every time your printer powers up it's likely to run a brief cleaning cycle, resulting in a few drops of ink being fired through the nozzles – so that's something else to bear in mind.

Canon
PIXMA
XXL
581

Even if you never print in colour, the cyan, magenta and yellow inks will eventually evaporate

WHAT'S THE DIFFERENCE BETWEEN...

Hz numbers on PC monitors?

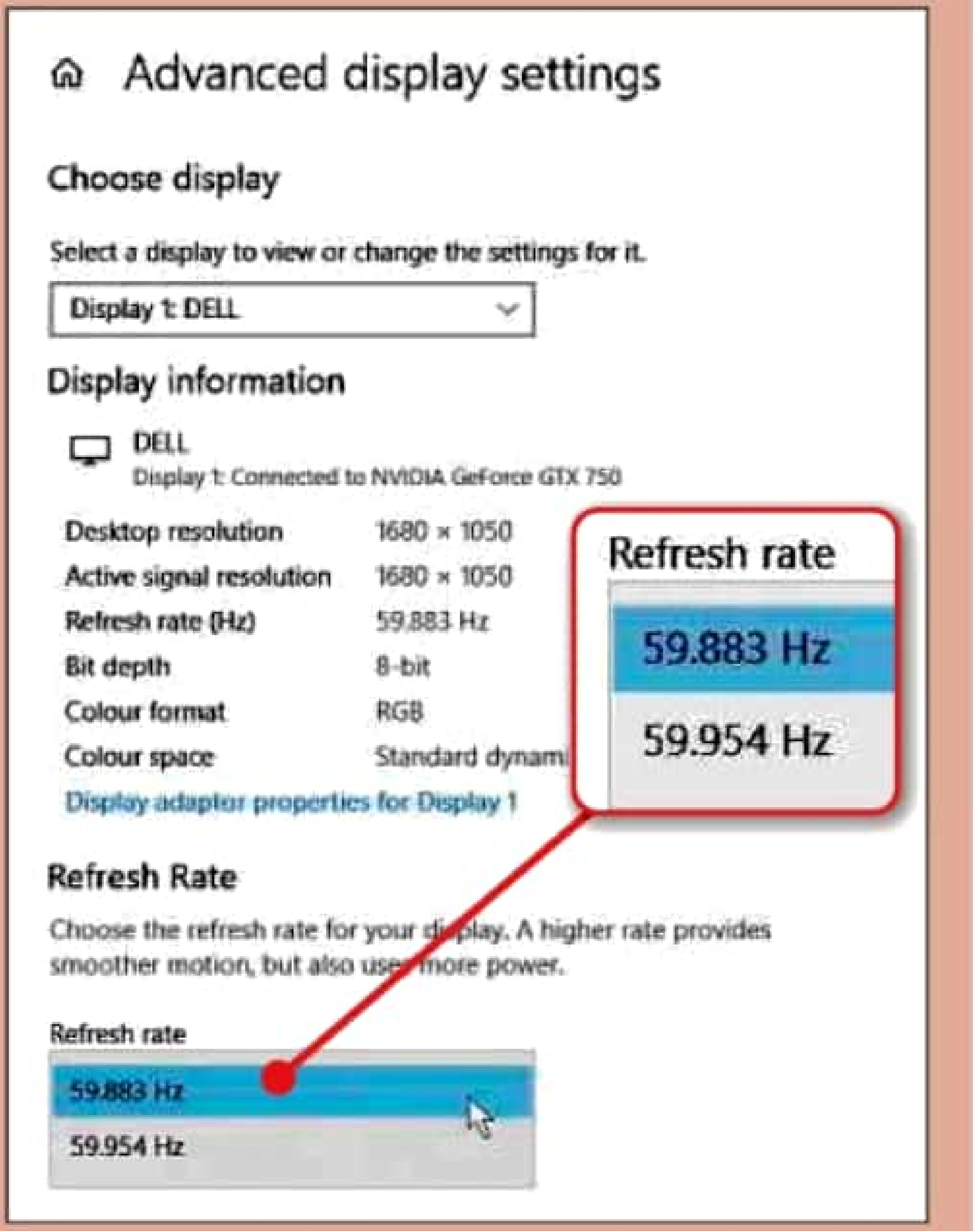
Q I want to buy a new monitor to replace my old 19in one, which I must have had for 10 years. I'm thinking about a 24in screen, for the extra space. There are loads under £100 but also loads that are much more expensive. One key difference seems to be that the costlier displays are 144Hz, while the cheaper ones are usually 60Hz. I kind of understand that this is to do with how quickly the screen updates, but what does that mean to me as a Windows 10 user? I don't have any real complaints about my existing display, other than its size. How can I find out what Hz my current monitor is?

Alan Thomas

A Hz is short for hertz, which is a unit of frequency equivalent to one per second. So, yes, you're right to think that a 60Hz display will update (or 'refresh') its picture 60 times each second, while a 144Hz monitor refreshes the screen 144 times per second.

The objective benefit is that faster refresh rates lead to a steadier screen and less flicker. However, not everyone can tell the difference, particularly when using everyday Windows 10 apps. However, if you're a gamer – and your computer and graphics card are up to it – then playing at frame rates above 60fps would benefit from a display with a faster refresh rate, giving you a smoother visual experience.

Given its age, your monitor is probably 60Hz. To check, click Start followed by the Settings cog, and then System followed by Display. Then, in the right-hand pane, scroll to find and then click 'Advanced display settings'. There, under the 'Display information' heading, you'll see the refresh rate. Note that for technical reasons it might not be an exact figure, like '60', because the precise refresh rate depends on the resolution – but it'll be close enough. You can click to expand the 'Refresh rate' dropdown menu to see if higher (or lower) rates are supported (see screenshot above).



Advanced display settings

Choose display

Select a display to view or change the settings for it.

Display 1: DELL

Display information

DELL
Display 1: Connected to NVIDIA GeForce GTX 750

Desktop resolution 1680 × 1050
Active signal resolution 1680 × 1050
Refresh rate (Hz) 59.883 Hz
Bit depth 8-bit
Colour format RGB
Colour space Standard dynami

Display adaptor properties for Display 1

Refresh Rate

Choose the refresh rate for your display. A higher rate provides smoother motion, but also uses more power.

Refresh rate
59.883 Hz
59.954 Hz

Check in Windows Settings to see which refresh rates your monitor supports

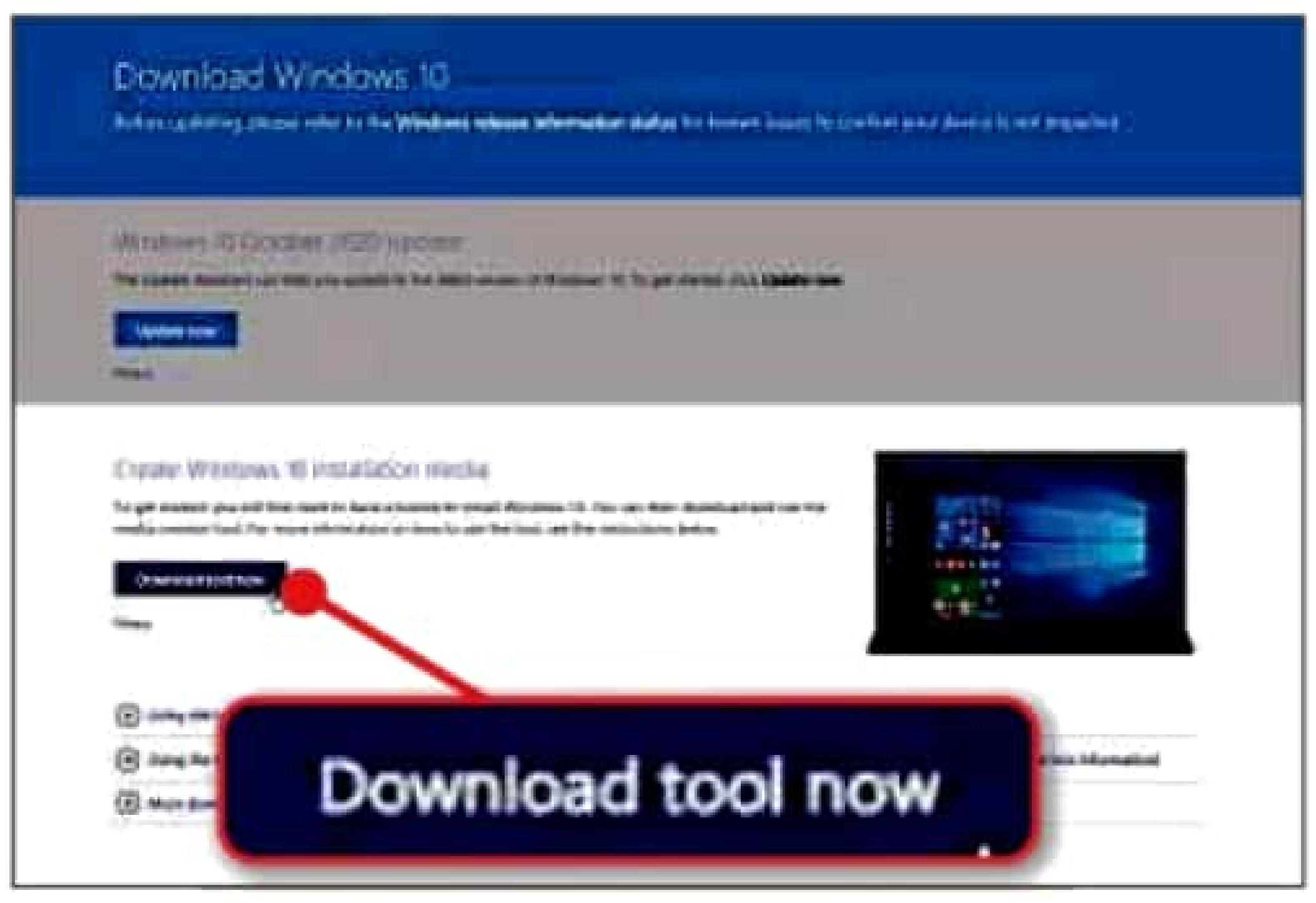
Want to know the difference between technical terms? Email noproblem@computeractive.co.uk

Is China stopping me from updating Windows 10?

Q I have three laptops. The oldest and newest are both HP, and are successfully running the latest 20H2 (October 2020) update. The middle laptop, a Lenovo, is still running 1909 because the 2004 update was never allowed by Microsoft – and the subsequent 20H2 is not even mentioned. Does this mean my Lenovo will never update beyond 1909? What happens when 1909 is no longer valid, as I believe will be the case next spring? Is there a possibility this might be linked to the American sanctions on China (because Lenovo is a Chinese company)?

Maurice Seamons

A We can't claim to have expert knowledge of America's sanctions against China, but we doubt this has anything to do with them. Rather, this could be down to a compatibility hold. We've explained these before but, to recap, they're digital blocks Microsoft puts in place to stop owners of problematic hardware from downloading Windows updates.



Download Windows 10
Windows 10 October 2020 Update
Update now
Create Windows 10 installation media
Download tool now

Download Microsoft's media-creation tool if you need to force an install of 20H2

We don't know anything about your laptop, other than its manufacturer, but you can check the list of unresolved problems with 1909 at www.snipca.com/36913. It could be that the quirks will eventually be fixed, either by Microsoft or by new drivers released by Lenovo. Otherwise then, yes, one day you'll be left with a laptop that's running an unsupported version of Windows 10. That's not good, and will only ever get less good.

If it does reach that point then you can either live with the ever-increasing risk of using a PC with an unsupported version of Windows 10, or take a different chance by forcing the install of 20H2 (or whatever comes next). You can do this by using Microsoft's media-creation tool, which is a free download from www.snipca.com/36914 (see screenshot left). The latter is clearly the way to go, but only when support for 1909 is at an end.

Next Issue

ON SALE
Weds
10 Feb

- What's wrong with my old PC?
- Can I change my photo dates?
- Why is my laptop Wi-Fi lagging? ...And many more

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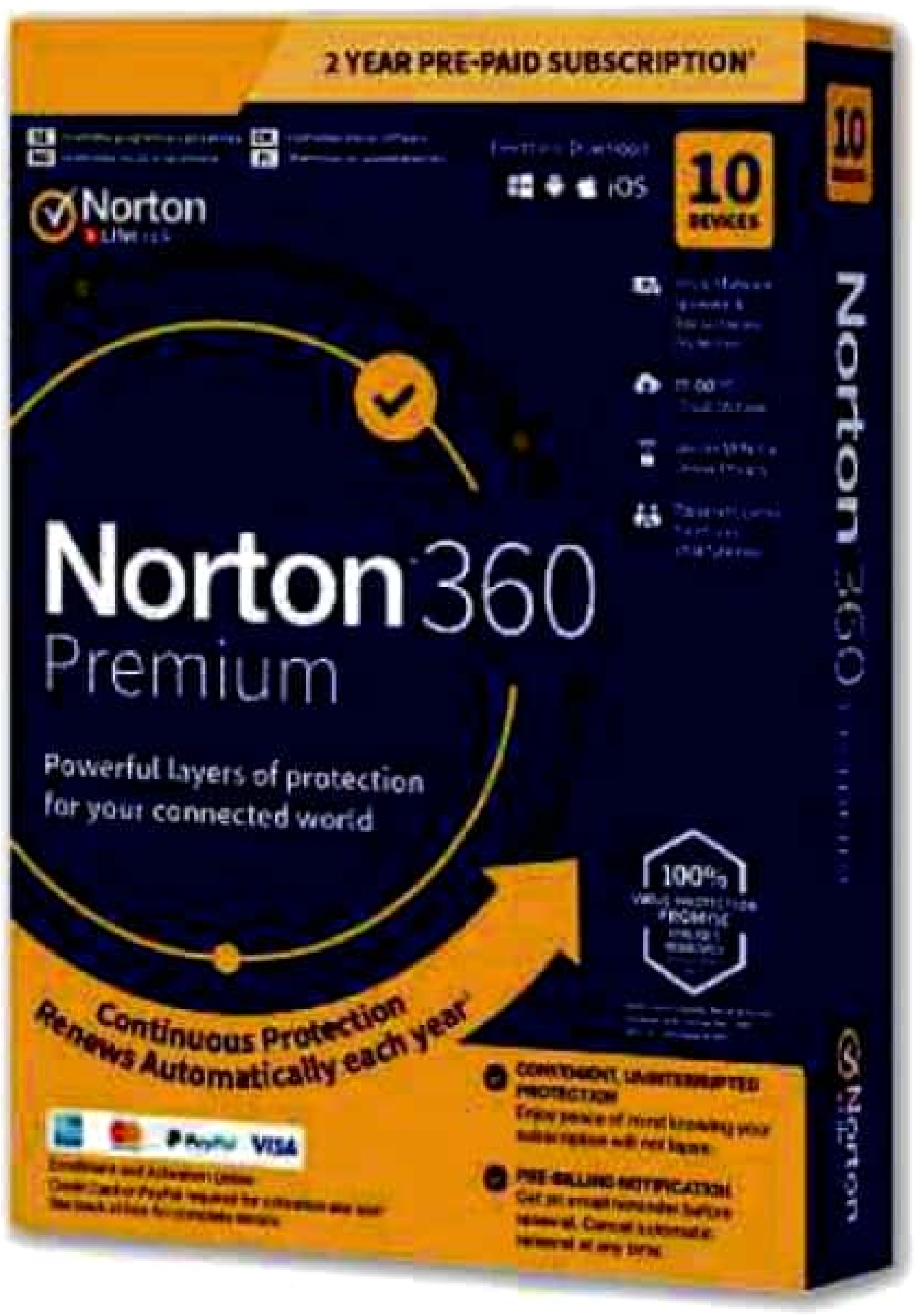
2 YEAR PRE-PAID SUBSCRIPTION
Norton
10 DEVICES
Norton 360
Premium
Powerful layers of protection for your connected world
Continuous Protection Renews Automatically each year
100%

Norton is made by respected US security company Symantec. It has always performed strongly in *Computeractive* antivirus tests, so we highly recommend it.

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*while stocks last

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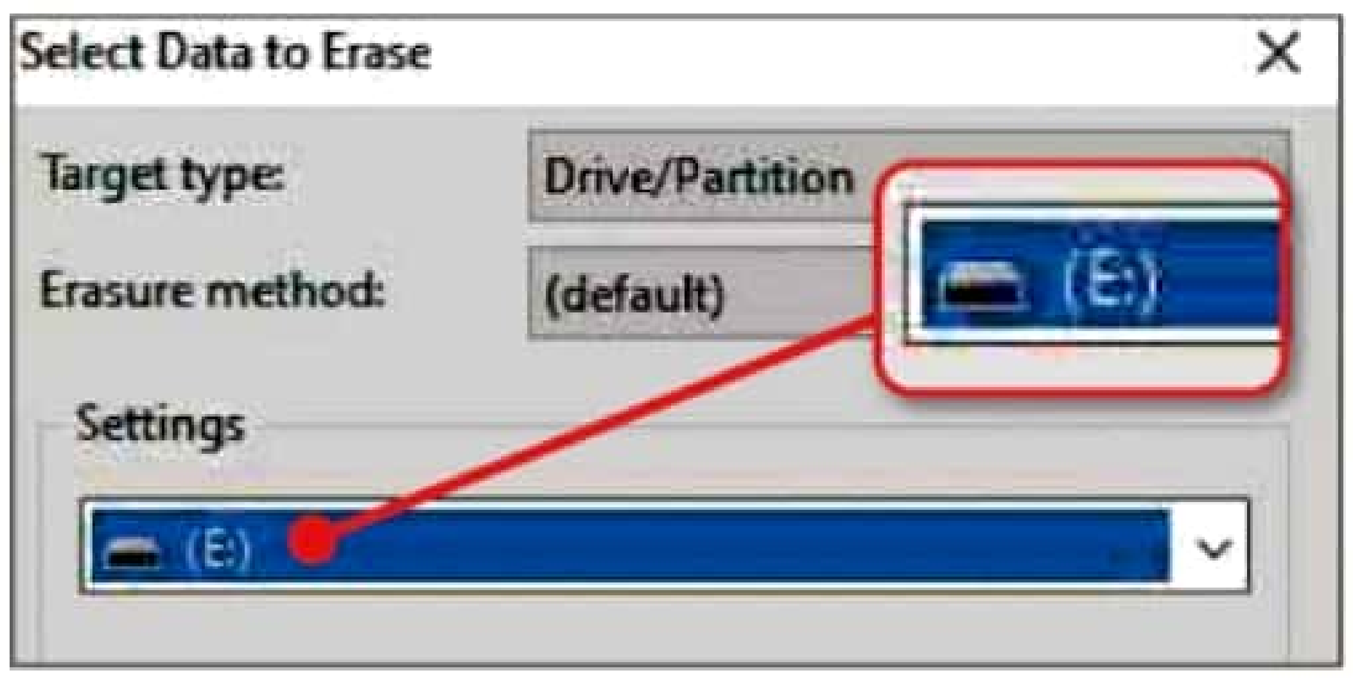
Which USB stick should we select when erasing files?

Q Are you trying to confuse us or am I missing something in Issue 594's 'Remove all your personal files from your USB sticks' Workshop? In Step 5, you tell us to make absolutely sure that we've selected the correct drive, further explaining how to use File Explorer to check. However, despite declaring that the stick you were using was drive letter E, you immediately afterwards say: "so we're selecting 'USB Drive (D:)'"! More experienced readers will recognise the mistake, but those less familiar with things might well misunderstand and wipe the wrong device or drive. Despite this, you can also add my compliments on a brilliant magazine to those you already have.

I M Williams



Select Data to Erase

Target type: Drive/Partition

Erasure method: (default)

Settings

(E:)

We mistakenly said the relevant drive was D, when we should have indicated Drive E

A We don't have much to add to what you've said, other than to admit that this was a simple mistake. It happened because our test machine had two USB sticks inserted. We did choose drive E and wrote that drive E was the one to select. However, we accidentally took the screenshot before making that selection. A well-intentioned member of our production staff then amended the writer's words to reflect this incorrect screenshot – and, well, here we are.

We are sorry about this error and happy to publish your rebuke and our explanation of how it occurred. So, to stress again: use File Explorer to identify the relevant drive, and be sure to select the correct one from Eraser's dropdown menu (see screenshot below left).

What's wrong with my RAM upgrade?

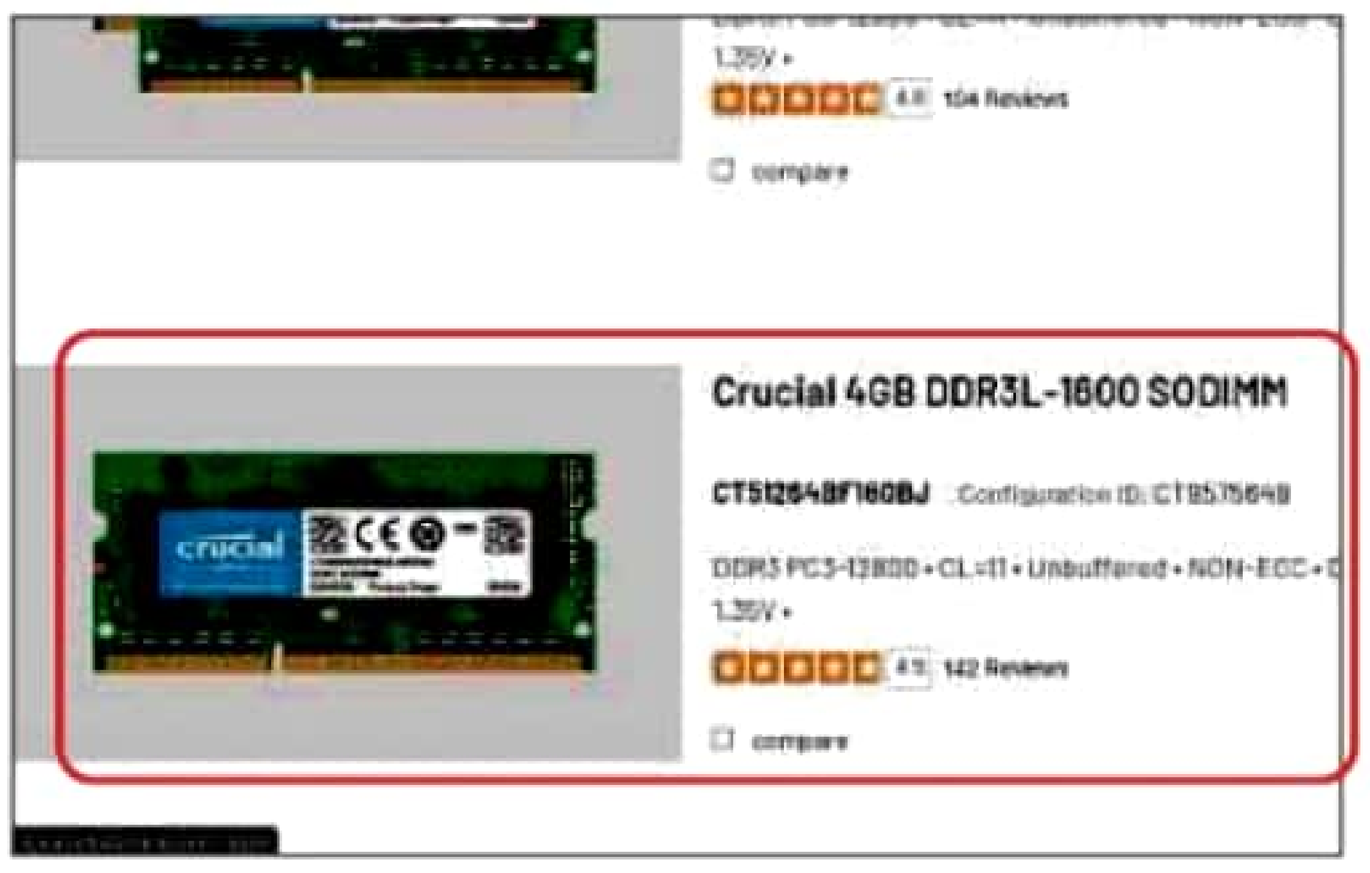
Q After reading your reply to David Salter's question in Issue 593's Problems Solved (page 65), I have added an extra 4GB of RAM to my own Toshiba Satellite C660D. However, I got a message saying there's a problem that required a restart, though restarting just produced the same message! I removed the extra RAM and the machine was fine again. Can you tell me why it would not take the extra memory?

Eddie Loft

A You didn't identify your exact laptop model or the RAM module that you bought. However, we think that you might have a machine with just 2GB of base memory to which you added a 4GB module. While that can work, it will do so only if the two modules have matching voltages. Moreover, if the speed of the new module is faster than that of the original 2GB module, the new one would need to operate at the lower speed – assuming even that the specific module draws a matching voltage.

We know there's a fair few ifs here but we suspect that there's simply a mismatch between the module you've bought and the one that's already in the computer. This would cause the kind of error message that you're seeing.

You can fix this either by buying a second, matching 4GB module (for a total of 8GB RAM, see screenshot below left) and fitting them both; or by removing and discarding the existing 2GB module before replacing it with the 4GB one – leaving you 2GB up overall.



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Eddie could buy a second, matching 4GB module to increase his RAM to 8GB

Why shouldn't we use SanDisk USB sticks?

Q I was interested in the 'Turn an old laptop into a Chromebook' How To feature in Issue 594. I have an old Gateway laptop that accepted Windows 10 until version 1709, which trashed most of my drivers and there are no updates available! I thought I might be able to revive it by turning it into a Chromebook and had recently bought a pack of USB sticks, just sitting ready to be used. However, you said in the article not to use SanDisk sticks, which is what mine are! I wonder why, as I thought they were the same as any other USB sticks? What's the difference, please, and why won't they do? What else are they not suitable for?

Dianna Crowther

A There's little difference between your SanDisk USB sticks and those of pretty much any other manufacturer – and it's likely that they will work just fine as a medium for storing and installing CloudReady.

So, why did we suggest otherwise? Well, because we inadvertently left out the word 'some'. Developer Neverware has a support page, at www.snipca.com/36930, that explains the problems some users have encountered when trying to install CloudReady specifically from SanDisk USB sticks. However, to reiterate, that advice relates to some SanDisk drives, not all of them. We apologise for this confusion but the good news is that your SanDisk sticks will probably be fine for this task.

Jargon **Buster**

3G/4G/5G Technologies that deliver faster mobile broadband.

4K Video with a resolution of at least 3840x2160 pixels.

720p/1080p/1440p Common types of high-definition video of 1280x720, 1920x1080 and 2560x1440 pixels respectively.

802.11ac A standard for wireless networks that allows for much higher transfer speeds than **802.11n**.

Add-on A program that adds extra features to your browser.

ADSL Asymmetric Digital Subscriber Line. A technology that converts a standard phone line into a broadband internet connection.

AMOLED Active-Matrix Organic Light-Emitting Diode. An alternative technology to LCD for creating flat-panel displays. Most commonly used in smartphones, tablets and smartwatches.

aptX A codec used to compress audio so it can be transmitted over Bluetooth with minimal loss in quality.

Augmented reality Lets you view the real world on a digital display and add elements from the digital world.

Bandwidth A measure of how much data can be transferred through a connection at one time.

Benchmarking Comparing software and products with an accepted standard.

BIOS Basic Input-Output System. Software built into every PC that connects the vital components. It's visible for a few seconds when the PC starts.

Blue light Light given off by PC and phone screens. Can disrupt sleep patterns.

Bootable Describes a DVD with system files on it so it can be used to start up your computer.

Breadcrumb Signs on a website that show what you've clicked to get there.

Cache A temporary space for storing information. Can be memory used on a computer processor, or space on a hard drive used by a web browser.

Cast To send content from your PC to TV.

Cat7 Category 7. Name given to newer, faster computer network cables.

cd/m^2 Candela per square metre. Standard unit of brightness.

Clock speed The speed at which a computer processor can perform operations. Measured in Gigahertz (GHz).

Codec Short for Compressor/Decompressor. A file that tells a computer how to record or play a type of media file.

Core Units on a processor that carry out program instructions.

DCI-P3 A colour space that has a wider spectrum than sRGB. Used by US film industry.

Delta E A measurement that shows how the human eye perceives different colours.

DirectX A Microsoft technology required to run many games in Windows.

DisplayPort A new socket for connecting monitors.

DNS Domain Name System. A technology that associates computers with their addresses on the internet.

DOS Disk Operating System. DOS was the predecessor to Windows.

dpi Dots per inch. A measure of printed image quality, or the size an object will be shown on screen.

Driver A file that tells Windows how to work with an external device.

DVI Digital Visual Interface. A common type of display connector that can carry a digital signal.

EPUB A file format used by many popular ebook readers.

EXE A program file designed to run in Windows. Has the file extension .exe.

Firmware Basic software stored on hardware, such as a processor, to control its operation.

FLAC Free Lossless Audio Codec. A type of digital audio file that can be created from CD with no loss of audio quality.

Fps Frames per second, normally used to indicate gaming performance.

Frame rate The number of still images, or frames, shown per second to create a moving image. Higher frame rates make games appear smoother and more realistic.

GEDCOM Short for Genealogical Data Communication. A file format used by genealogy programs to share data.

Gesture Finger movements on a screen that perform an action, such as pinching to zoom.

Graphics card A component in a computer that produces the image shown on the monitor.

Greyscale The range of grey shades from white to black, used on both black and white displays and monochrome printouts.

GSM Grams per Square Metre.

GUI Graphical User Interface. Any system that allows users to interact with a computer using images on screen. Windows uses a GUI.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

Hotspot A public area covered by a Wi-Fi network that allows you to access the internet, either free or for a fee.

IPS A screen technology. Monitors that use it have wider viewing angles and better, more accurate-looking colours compared with monitors that do not use this technology.

ISO file A type of image file that contains all the data from a CD or DVD.

JPEG Joint Photograph Experts Group. A common type of image file created by most digital cameras. Some image quality is lost with each save.

LAN Local-area network. A computer network in one place, such as a home or office.

LCD Liquid-crystal display. The technology used to create almost all flatscreen monitors.

LED Light-emitting diode. An electronic device that emits light. Used on almost all electronic devices, and to provide the backlight for some LCDs.

M.2 A standard specification for internal PC expansion cards and connectors.

Macro An automated series of commands or options that can be run at any time. Handy if you often need to perform repetitive actions.

Mesh Wi-Fi Wireless network system that uses multiple, connected routers to stretch Wi-Fi further than a traditional router.

Metadata A set of data that gives information about a file.

MOBI Short for Mobipocket. Ebook format that lets readers add their own content, such as drawings, annotations and bookmarks.

Multiplexes A collection of television programme, radio and data services that are broadcast together in a digital signal.

NAS Network-attached storage. A hard drive attached to a network that can be shared with other PCs.

NFC Near-field communication. A technology that allows two devices to communicate by being touched together or placed near to each other. Can be used to pay for items in some shops using compatible mobile phones.

NVMe Non-Volatile Memory Express. An interface that lets solid-state drives work faster.

OCR Optical character recognition. The process by which printed text is scanned and converted into documents that can be edited.

OLED Organic light-emitting diode. A thin-film organic light-emitting diode used in computer displays and television screens.

Open source Software that can be modified by anyone, rather than just by the employees of the company that created it.

Optical image stabilisation A mechanism built into digital cameras that compensates for any shaking or vibrations that occur during shooting.

Overclock Make a processor work faster to boost performance at the cost of it getting hotter and requiring more power.

PAC Porting Authorisation Code. A unique code that lets users retain their mobile telephone number when switching operators.

Plain text Text in a document that doesn't contain any formatting, such as bold characters and italics.

Plug-in A small program that adds extra features to software or to your web browser.

PNG Portable Network Graphics. A format for images that shrinks file sizes using compression but without discarding any data.

Port forwarding Choosing which computer in your network a router should connect to.

RAM Random-access memory. The computer's working area, used for data storage while the PC is switched on. Its capacity is measured in megabytes (MB): the more memory your PC has, the more things it can process simultaneously and the faster it will seem.

SATA Serial ATA. An interface for connecting hard drives and optical discs to a computer.

Script A short program that is stored on a web server to control part of a website. For example, a script could check that a date you have entered is valid, or move words across the screen.

SD card Secure Digital card. A popular type of memory card.

Source code Program instructions written in a high-level language that are readable by people but not computers.

sRGB A standard RGB colour space for use on monitors, printers and the internet.

SSD Solid-state drive. Storage that, unlike a hard drive, uses no moving parts. Faster but more expensive than conventional hard drives.

System restore point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

Travel The distance the keys of a keyboard have to be pressed before the keystroke is recognised.

TV tuner An expansion card in a PC that receives TV signals.

USB 2.0/3.0/3.1 Faster successors to USB.

USB-C A new connector that's reversible.

Water-cooling Lowering a PC's temperature using water rather than fans.

Web traffic The amount of people visiting a website.

Wi-fi 6 Wi-Fi standard with speeds up to 10 times faster than 802.11ac. Also called **802.11ax**.

WPA Wi-Fi Protected Access. A secure form of protection for wireless networks.

ZIP file A file that contains compressed documents or files.

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Easy when you Know How

Robert Irvine is neither the messiah nor a naughty boy – he just wants to....

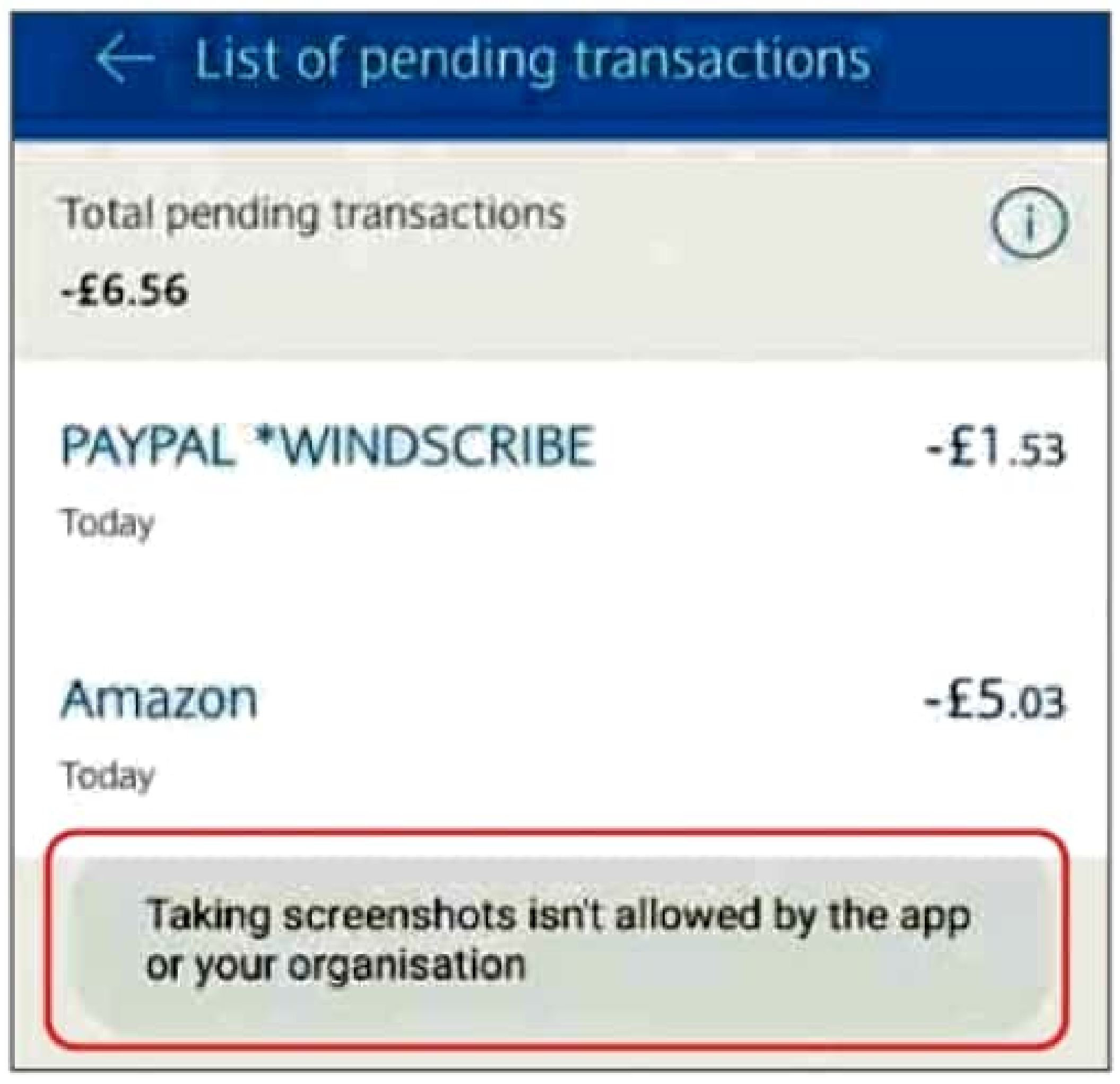
Unlock screenshot restrictions

Back when the 'new normal' had yet to become the nightmare that seemingly never ends, I attended a performance of Handel's *Messiah* at the Royal Albert Hall. Keen to show off my opulent surroundings to friends, I whipped out my phone and took a couple of photos.

Big mistake. Immediately, an usher (or 'front of house operative', if that's their official name) came charging over to scold me that "we don't allow cameras here, sir". Although pleased to be called "sir" and tempted to point out that the concert hadn't started yet and I was merely snapping pics of the lovely balconies, I obediently put my handset away. The shame of being ejected from the Albert Hall was too great a risk to take.

> "Hey Google, take a screenshot", I ordered and was hopeful when the nice robot lady replied: "Okay, taking a screenshot"

I was reminded of this incident while trying to capture a screenshot of the Barclays bank app on my Android phone, only to be told that "taking screenshots isn't allowed by the app or your organisation" (see screenshot above right). I should add that the purpose of this wasn't a "look at how rich I am!" brag, but to record and share an unauthorised transaction for a service I'd previously cancelled.



← List of pending transactions

Total pending transactions
-£6.56

PAYPAL *WINDSCRIBE -£1.53
Today

Amazon -£5.03
Today

Taking screenshots isn't allowed by the app or your organisation

Don't bank on it: Robert was prevented from taking a grab of his Barclays app

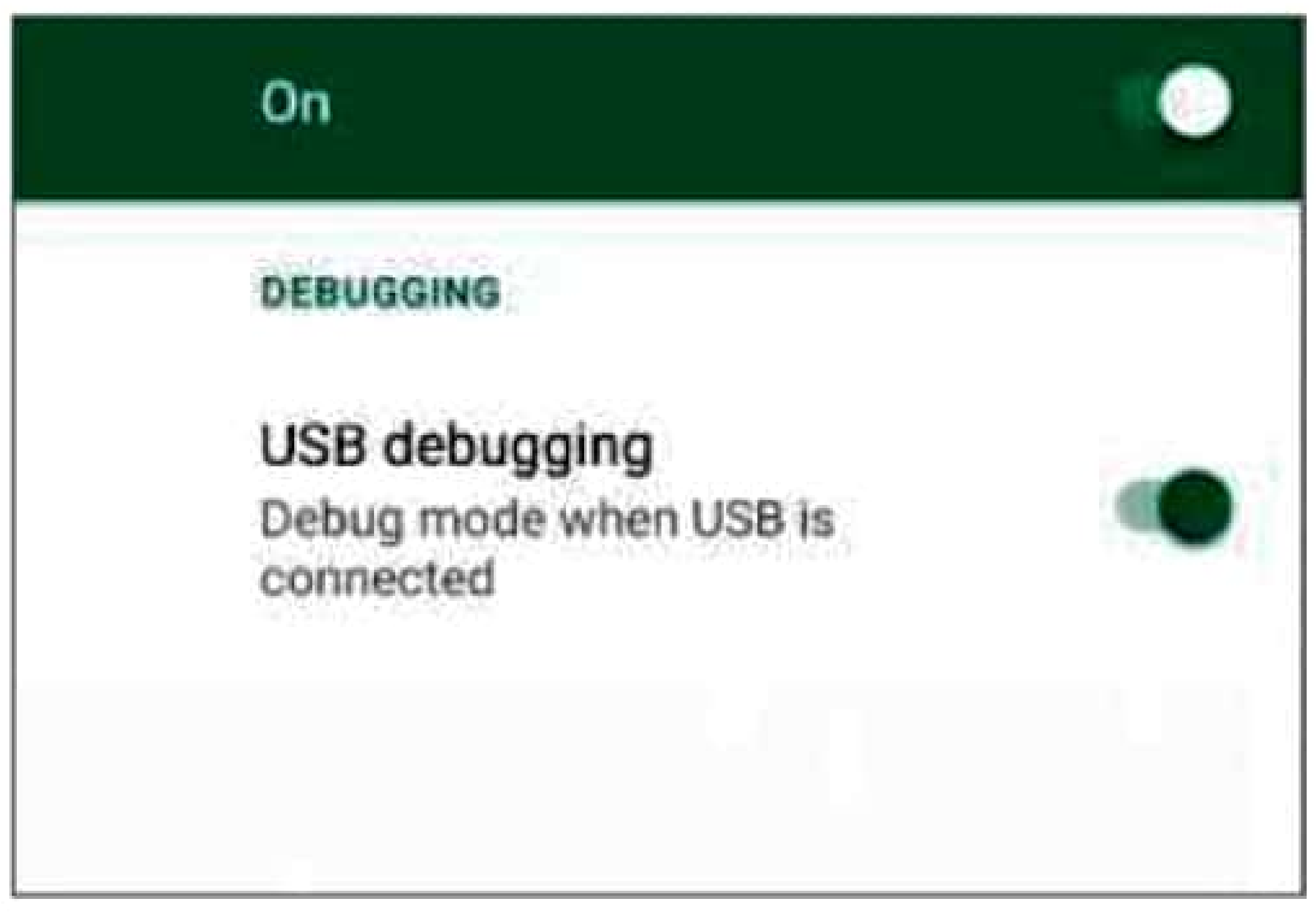
The screenshot function is also disabled in several other data-sensitive mobile apps, presumably for security reasons. For example, it won't work in incognito mode in Chrome, although this may change in an imminent update (www.snipca.com/37043).

The fiddly, old-fashioned method of pressing the power and volume-down buttons at the same time failed to bypass the block, so I was forced to seek an alternative screenshot solution.

One suggestion I found online was to use my voice instead of my fingers, via the magic of Google Assistant. "Hey Google, take a screenshot", I ordered and was hopeful when the nice robot lady replied: "Okay, taking a screenshot". Sadly, the result was an empty black rectangle, Barclays Bank proving too savvy for this vocal workaround.

Dismissing articles that said the only answer was to root my Android device, which would potentially open a whole world of pain, I kept looking until I discovered a tool called Scrcpy. Free to download from GitHub (www.snipca.com/37034), this lets you beat in-app restrictions by capturing Android screenshots from your PC. Despite its name bringing to mind Scrappy Doo and his annoying "Hey, Uncle Scoob!'' witterings, I decided to give Scrcpy a go.

After locating the download link on the typically baffling GitHub page, I extracted the contents of the ZIP file and ran the program by double-clicking the 'scrcpy.exe' file. Microsoft Defender's SmartScreen displayed a warning, but I ignored this by clicking 'More info' then 'Run anyway'.



On

DEBUGGING

USB debugging
Debug mode when USB is connected

Turn on USB debugging to mirror your Android screen on your Windows desktop

Nothing happened at first, so I connected my phone to my PC with a USB cable and tried again. Still nothing happened, and I was about to dismiss Scrcpy as being as useless as its cartoon near-namesake.

But on checking the GitHub page, I noticed that Scrcpy requires 'USB debugging' to be enabled on your Android device. To do this, I followed the instructions to go to Settings, 'About phone' and tap 'Build number' seven times to unlock Android's secret 'Developer options'. I then went to System, Advanced, 'Developer options' and turned on USB debugging there (see screenshot above).

When I reconnected my phone to my PC, a message appeared asking me to allow USB debugging. I did so, ran Scrcpy again and my Android screen was miraculously mirrored on my Windows desktop. I was then able to capture a screenshot of the restricted banking app using the excellent image editor IrfanView (www.irfanview.com).

"Hallelujah!" I proclaimed, which brought me full circle to Handel's *Messiah*.

✉ Need help with taking screenshots on your PC, phone or tablet? Let us know: noproblem@computeractive.co.uk

Next issue: Robert creates his own QR codes

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